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Work Injuries in the United States, 1947

British Labor Under Labor Government: Part II.—Position and Role of Trade-Unions

Operations of Credit Unions in 1947

United States Department of Labor • Bureau of Labor Statistics

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Monthly Labor Review

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

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This Issue in Brief . . .

WORK INJURIES IN THE UNITED STATES DURING 1947 (p. 361) shows that the Bureau of Labor Statistics estimate of total disabling work injuries in 1947 was less than 1 percent above the 1946 total. This may, nonetheless, be regarded as an improvement, in view of the expansion in industrial activity during the year. Fatalities, however, increased 3 percent, this disproportionate rise resulting primarily from the Texas City explosion and the Centralia mine disaster. By contrast, injuries resulting in permanent-partial impairments declined. In manufacturing, the volume of disabling injuries was lower than in 1946, despite the substantial expansion in activities, and represents a favorable trend in safety. Furthermore, well over half of the individual manufacturing industries had significantly lower injury-frequency rates in 1947 than in 1946.

Union leaders in Great Britain are conscious of responsibilities of an entirely new character and magnitude—both to their members and to the community—since the Labor Party's assumption of office. During the decade 1938–48, British unions not only increased in membership but also in their influence on national life, as described in BRITISH LABOR UNDER LABOR GOVERNMENT—PART II: POSITION AND ROLE OF TRADE-UNIONS (p. 366). Both employers (who are also highly organized) and labor have a voice in resolving trade and management problems. In this connection, BACKGROUND OF BRITISH LABOR MOVEMENT (p. 392) is of interest. Part I of British Labor under Labor Government, which appeared in the August issue of the Review, dealt with the economic position of labor and the gains made in earnings and working conditions.

Considerable interest in the adequacy of the Nation's labor supply has resulted from the passage of a series of Congressional measures authorizing a substantial expansion of the nation military establishment for the fiscal year 194 In MANPOWER NEEDS OF THE EXPANDE DEFENSE PROGRAM (p. 373), appraisals of th requirements of this program indicate that abou 1 million additional workers—both military an civilian—will be needed by the end of Jun 1949. Although the labor supply, on an over-a basis, is expected to meet these demands, shortage may develop in certain localities and in particula types of work.

An all-time peak in membership, assets, an total business was reached in the OPERATIONS O CREDIT UNIONS IN 1947 (p. 385). Compared wit 1946, membership increased 10.5 percent, asset 19.4 percent, and business done (i. e., loans made rose 56.5 percent. Assets in these organization exceeded half a billion dollars.

The extent of organized labor's participatio in cooperatives was the subject of a recent Burea study. Although unions as such took little o no part in promotion activities, UNION LABO AND NONFARM COOPERATIVES (p. 388) indicate that often union members were leaders in th cooperative projects, and that unions did assis in various ways, such as endorsement of the co-ops lending or investing money in the associations.

In revising the retail food price index, th Bureau reduced the number of foods include from 62 to 50. The changes in the samples o quotations obtained are explained in REVISION O RETAIL FOOD PRICE INDEX IN AUGUST 194 (p. 397), which also lists the foods formerly price and those included in the revised index, with th imputation of weights. Tests made by th Bureau showed that the reduction in the numbe of foods priced and of quotations obtained ha had no significant effect on the all-foods index o on the average food prices for all cities combined

REVISED INDEXES OF AGRICULTURAL MA CHINERY AND EQUIPMENT PRICES (p. 403) gives th results of a major revision made in the Bureau' primary market price index. The revision con sisted of certain changes in line with curren agricultural practice. The revised index wa linked to the two former series in order to hav available a continuous series of indexes of "farm machinery" and "agricultural machinery an equipment" by months from January 1913.

The Labor Month in Review

ECONOMIC FACTORS affecting labor and industrial relations were little changed in September. The demand for labor apparently continued undiminished with evidences of slackening reported in only a few industries or areas. Total industrial production approached the peak postwar levels reached in the first quarter of the year, with corresponding gains in employment in industrial establishments. Meanwhile the labor market remained extremely tight. Employment in nonindustrial activities, except for agriculture, dropped in automatic fashion as teen-agers quit vacation jobs to return to school. Unemployment, nationally, remained relatively stable at 1.9 million. Industrial commodity prices in primary markets remained strong and consumers' prices, except for foods, continued the advances of previous months.

Strike Idleness Increases

While fewer work stoppages occurred during September than in the previous month, several large strikes resulted in an estimated increase of about ½ million in man-days lost in industrial disputes. About 16,000 employees of nine oil companies in California struck for a wage increase, shutting down refineries which normally supply 95 percent of the petroleum products used on the West Coast. A strike of 170 plant guards at the Briggs Manufacturing Co. led to a practical shutdown when 25,000 Briggs' employees refused to pass the guards' picket line. The resulting loss of supplies of auto bodies and parts forced serious curtailment of production at several of the large automobile assembly plants. About 30,000 workers employed in the shipping industry on the West Coast, members of the International Longshoremen's and Warehousemen's Union (CIO) and four other groups, went on strike on September 2 and were still out at the end of the month. The issues in this case were not only wages but also the matter of the hiring hall, which, as operated in the Great Lakes area, the National Labor Relations Board has ruled violates the closed-shop provisions of the Labor Management Relations Act.

During September another step was taken toward a final determination of the constitutionality of section 9 (h) of the Labor Management Relations Act providing that union officers must sign non-Communist affidavits before their unions may utilize the services of the NLRB.

The requirement was held constitutional by a 2 to 1 decision of a United States Circuit Court of Appeals in a case arising out of an appeal by the Inland Steel Co. from a decision of the NLRB. The Board had rules that the company must bargain with the United Steelworkers of America (CIO) on retirement and pension plans, provided union officers signed non-Communist affidavits. The union failed to comply and also appealed, objecting to this part of the Board's ruling.

The majority of the court pointed out that the requirement did not constitute an abridgement of the right of free speech or assembly, nor was any union officer denied any political rights. The right to the services of a Government agency was a privilege the Congress may deny in the national interest which, in this case, is the need to avoid unnecessary labor difficulties which might be instigated by Communists in strategic union positions. In the other aspect of the case, the court ruled unanimously that the employers must bargain on retirement and pension plans because they constituted "wages" and "other conditions of employment" under terms of the act requiring bargaining on these subjects.

New Wage Contracts

Wage increases recently negotiated cover a variety of industries in different parts of the country. Among the important new agreements carrying higher wage rates is the one between the Western Electric Co. and the Association of Communications Equipment Workers (CIO), covering approximately 25,000 employees in different areas. The agreement provides for increases of 8 to 14 cents an hour in parts of the South, Southwest, and Midwest, and 9 to 15 cents an hour in other parts of the country. A wage increase of $4 a week for 12,000 telephone operators, members of the Communications Workers of America (Ind.),

employed by the New Jersey Bell Telephone, was ordered by an arbitration panel. This followed a similar increase granted a few days earlier to maintenance workers by another panel. Other increases to telephone workers were granted in Ohio, Illinois, and New England.

Several wage raises were recently granted affecting truck drivers, hotel employees, and all full-time employees of one of the large department stores in New York City. Other contracts with higher wage rates covered furniture workers on the West Coast, aircraft workers in southern California, and shipyard workers on the East and Gulf Coasts.

In the competition between increasing prices and increasing wage income, the average factory worker gained a little between July and August. Average weekly earnings in manufacturing of $53.86 in mid-August were at an all-time high. Increases in basic wage rates were largely responsible for raising average hourly earnings, excluding overtime, by more than a cent to $1.30, a continuation of an upward trend that has been practically uninterrupted during the postwar period.

Price Developments

Consumers have had little relief, except for some food items, from the continuous advance in retail prices since early spring. The Bureau of Labor Statistics consumers' price index rose to a new high level in mid-August, and there is no indication that the September figure will be significantly different. At 174.5 percent of the 1935–39 average, the August index was 8.9 percent higher than the year before and 77.0 percent above the August 1939 level. The increased price of food, which for several previous months had been the most important reason for the advance in the index, was not a factor during August. Some increases and some decreases, predominantly seasonal, resulted in an average decline of 0.1 percent in food prices. Average prices of all other groups increased, the greatest rise in terms of relative importance being in apparel.

During September the index of wholesale prices for all commodities declined, but was still close to the postwar high established in August. With the exception of farm products and related commodities, prices in primary markets fluctuated for the most part within a relatively narrow range. Continued weakness in cotton textile products was apparent, however, and certain agricultural products, not yet at their support levels, appeared likely to fall to such levels. There seemed little likelihood that prices of many other commodities would weaken in the immediate future.

Employment Declines Seasonally

The return of students to their classes during September, after holding temporary summer jobs, reduced total employment by almost a million, according to the Census Bureau's Monthly Report on the Labor Force. This was a larger decline than last year but reflects the extraordinary rise in teen-age employment during the summer vacation period. Total employment, however, was still at a level 1½ million above last September. Unemployment declined slightly to about 1.9 million, the level of a year ago. Some increase in agricultural employment occurred during September, one important reason being the need for more workers to pick the very large cotton crop.

For the first time since the rearmament program was announced, there were evidences of its direct demand on the manpower resources of the country. Aircraft employment increased somewhat from June to August and a further rise can be expected in the immediate future, according to the United States Employment Service. Increases in the recruitment of men for the armed forces, both through enlistments and selective service, will become increasingly important.

President's Safety Conference

Industrial accidents in the United States cost 16,000 to 18,000 workers' lives each year and another 90,000 are permanently crippled. President Truman called attention to this fact in his message to a preliminary Conference on Industrial Safety, held in Washington, September 27–29. The conference was called by the President, through the Bureau of Labor Standards of the United States Department of Labor, in order to set up a broad safety program to be developed by industrial communities throughout the country.

Work Injuries in the United States, 1947

Estimates of Disabling Work Injuries, Injury-Frequency Rates and Injury Severity in Manufacturing and Nonmanufacturing

FRANK S. MCELROY[1]

DESPITE A GENERAL RISE in employment and the effects of several major disasters, the total volume of disabling work injuries[2] in 1947 was essentially unchanged from the 1946 total. It was, however, the seventh consecutive year in which such injuries were in excess of 2 million.

Estimates of Disabling Work Injuries

The 1947 total of disabling work injuries was estimated by the Bureau of Labor Statistics as 2,059,000. This is less than 1 percent above the 1946 total (2,056,000) and, in view of the expansion in most industrial activities during the year, may be regarded as an improvement. The fatality record was less favorable, however. About 17,000 workers were killed in on-the-job accidents during 1947 as compared with 16,500 in 1946—an increase of 3 percent. This disproportionate rise in fatalities resulted primarily from the Texas City explosion and the Centralia mine disaster. In contrast, the volume of permanent-partial impairments declined from about 92,400 in 1946 to approximately 90,000 in 1947.

The actual time lost because of work injuries which occurred in 1947 is estimated as about 44,700,000 man-days, or the equivalent of a year's full-time employment for approximately 150,000 workers. This, however, represents only a part of the total production losses accruing from these injuries. If additional allowance is made for the future effects of the deaths and permanent physical impairments included in the 1947 total, the economic time loss chargeable to these injuries would amount to about 233,700,000 man-days. This is equivalent to a year's employment for 780,000 workers, or about six times as much time as was lost during the year because of strikes.

In addition to the 17,000 workers who died as a result of work injuries in 1947, there were 1,800 who will be totally disabled and 90,000 who will have some more or less disabling impairment for the rest of their lives. Each of the remaining 1,950,200 disabling injuries resulted in an inability to work lasting at least 1 full day after the day of injury, but without permanent ill-effects.

Although, as in previous years, there were more fatalities in agricultural activities than in any of the other major industry groups, the 1947 total of 4,300 was 200 less than the 1946 estimate. Similarly the volume of nonfatal injuries in agriculture was substantially less in 1947 than in 1946. Contributing factors in this reduction included the increased availability of new equipment, repair parts, and materials, and a generally high level of farm income, which permitted farmers to eliminate many physical hazards which had developed during the war period.

Manufacturing had the largest volume of disabling injuries among the major industry groups, but the 1947 total of 539,000 injuries was 2,500

[1] Of the Bureau's Branch of Industrial Hazards.

[2] A disabling work injury is an injury arising out of and in the course of employment which results in death or permanent impairment, or renders the injured person unable to work at a regularly established job throughout the hours corresponding to his regular shift on any day after the day of injury.

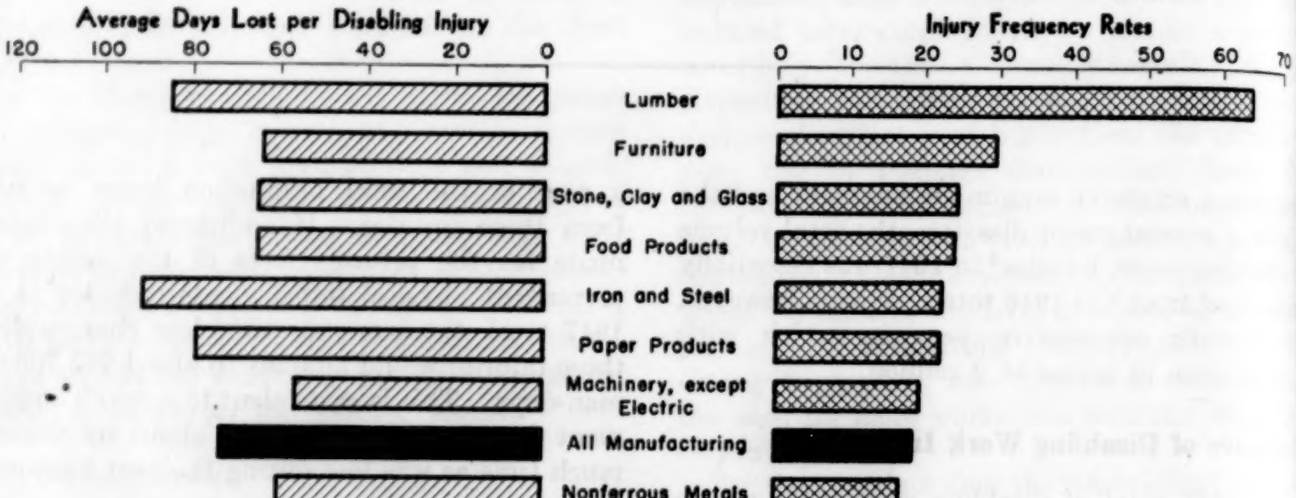
below the 1946 figure. In view of the substantial expansion in manufacturing activities, which normally would be expected to result in a disproportionately greater increase in injuries, this minor reduction actually represents a very favorable trend in manufacturing safety. There were, however, about 200 more deaths in manufactur during 1947 than in 1946, largely due to disastrous effects of the Texas City explosion.

Injuries to railroad workers, totaling abo 71,900, were nearly 6 percent fewer than in 19 Train-service and nontrain accidents both d

CHART 1

Injury Frequency Rates and Severity Averages

Major Manufacturing Groups, 1947



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creased in 1947. The volume of train accidents, on the other hand, increased about 8 percent as the total mileage operated increased about 1 percent. This resulted in a slight rise in the volume of train-accident injuries, particularly those attributed to derailments.

Expanded operations and increased employment during 1947 were largely responsible f the rise in the number of injuries in construction mining and quarrying, public utility operations trade, and miscellaneous transportation. In con struction, the 1947 total of 151,700 disablin injuries was 15 percent greater than in 1946. Because building construction, which generally

a lower incidence of serious injuries than heavy gineering and highway construction, had the atest expansion, the volume of construction alities increased only 9 percent to a total of 00. In mining and quarrying, fatalities in- ased 15 percent over 1946, although the total ume of injuries rose only 11 percent. Three jor explosions in bituminous coal mines contrib- d 146 fatalities to the total—111 workers were killed in the Centralia explosion alone—and three explosions in the anthracite field accounted for 33 additional deaths.

In the miscellaneous-industry group, composed largely of services and governmental operations, the total volume of disabling injuries, 382,000, was about 6 percent lower than in 1946, although the number of fatalities remained constant at about 2,500.

Estimated number of disabling injuries during 1947, by industry group

[Difference between total number of injuries and injuries to employees represents injuries to self-employed workers]

Industry group	All disabilities		Fatalities		Permanent-total disabilities		Permanent-partial disabilities		Temporary-total disabilities	
	Total	To employees	Total	To employees	Total	To employees	Total	To employees	Total	To employees
groups	2,059,000	1,634,600	17,000	12,300	1,800	1,400	90,000	71,800	1,950,200	1,549,100
iculture [1]	298,000	70,600	4,300	1,000	400	100	14,900	3,500	278,400	66,000
ning and quarrying [2]	92,900	88,300	1,500	1,400	200	200	4,100	3,900	87,100	82,800
struction [3]	151,700	105,100	2,400	1,800	300	200	4,300	3,000	144,700	100,100
nufacturing [4]	539,000	530,100	2,700	2,600	200	200	27,200	26,800	508,900	500,500
blic utilities	27,700	27,700	400	400	(5)	(5)	600	600	26,700	26,700
de [3]	360,600	287,700	1,500	1,300	100	100	8,600	6,900	350,400	279,400
lroads [6]	71,900	71,900	800	800	300	300	5,000	5,000	65,800	65,800
scellaneous transportation [3]	135,200	116,200	900	700	100	100	7,400	6,400	126,800	109,000
vices, government, and miscellaneous industries [3]	382,000	337,000	2,500	2,300	200	200	17,900	15,700	361,400	318,800

[1] Based on fragmentary data.
[2] Based largely on Bureau of Mines data.
[3] Based on small sample studies.
[4] Based on comprehensive survey.
[5] Less than 50.
[6] Based on Interstate Commerce Commission data.

jury-Frequency Rates

Manufacturing. Reflecting widespread improvement in the frequency rates for the individual manufacturing industries, the weighted injury-frequency rate for all manufacturing dropped nearly 6 percent from an average of 19.9 disabling injuries per million employee-hours worked in 1946 to an average of 18.8 in 1947.

Among the 18 major groups of manufacturing industries, there were 12 for which the 1947 rates were at least a full frequency-rate point lower than their 1946 rates; 5 had rates which differed by less than a point from their 1946 levels; only one, the lumber and basic timber products group, had a higher rate than in 1946.

Well over half of the individual manufacturing industries had significantly lower rates in 1947 than in 1946. Of the 151 industries for which comparison was possible, 83 showed reductions of from 1 to 5 points in their frequency rates, and 9 showed reductions of over 5 points. For 36 industries the 1947 rates varied less than a full point from the 1946 averages. Only 23 industries had higher rates in 1947 than in 1946, and only 4 of these increases amounted to as much as 5 frequency-rate points.

Among the industries for which lower rates were recorded in 1947, the achievement of the relatively small boat-building and boat-repair industry was outstanding. For this group of plants the 1947 frequency rate was 33.8, a drop of nearly 14 points from the average of 47.7 in 1946. This was in sharp contrast to the rise in the rate for shipbuilding and ship repairs, which moved from 20.7 in 1946 to 28.1 in 1947. Other noteworthy rate reductions included slaughtering and meat-packing, from 35.7 to 29.9; breweries, from 45.3 to 38.4; plywood mills, from 43.9 to 38.5; and plants manufacturing elevators, escalators, and conveyors, from 28.4 to 20.0.

The most pronounced rate increases were from 80.4 in 1946 to 102.8 in 1947 for logging; from 35.1 to 42.3 for planing mills; from 19.2 to 25.0 for battery manufacturing; and from 10.7 to 15.8 for plants manufacturing professional and scientific instruments and supplies.

The lowest injury-frequency rate recorded for any manufacturing industry in 1947 was 1.9 for the synthetic-rubber industry. The electric lamp (bulbs) industry was second with a rate of 3.3, followed by the women's and children's clothing industry, 4.3, and the aircraft industry, 4.8.

The highest frequency rate among the manufacturing industries was 102.8 for logging. Sawmills had a rate of 66.6, and combination saw- and planing-mills, a rate of 56.7. Other industries with outstandingly high rates included iron foundries, 44.5; structural clay products, 43.9; planing mills, 42.3; and wooden containers, 41.9.

Nonmanufacturing. Although there were a few individual industries which had significant changes in their 1947 frequency rates, the general level of rates for the nonmanufacturing industries included in the Bureau's survey held very close to that of 1946.

In the construction group, the rate for building construction rose from 35.4 in 1946 to 38.7 in 1947. This was offset, however, by a drop in the rate for heavy engineering from 46.7 to 41.8 and from 50.5 to 46.8 in the rate for highway construction.

In the transportation group (excluding railroads and air transport), the 1947 rates were lower for stevedoring, streetcar operations, bus operations, and warehousing and storage, but were slightly higher for trucking and hauling. The stevedoring rate of 72.4 was again one of the highest recorded.

In the heat, light, and power group, the frequency rate for electric distribution systems rose slightly from 14.8 to 16.4, but this was balanced by a drop from 24.5 to 23.0 in the gas distribution rate.

None of the rates for the industries in the personal services group changed as much as a full point from their 1946 levels. The business service group, on the other hand, showed a general trend to lower rates, with particular improvement in the automobile-repair and miscellaneous-repair classifications.

Increases in the rates for wholesale distributors (18.5 to 20.3), filling stations (8.8 to 10.6), and miscellaneous retail stores (10.8 to 12.4) raised the general average for the trade group from 14.2 in 1946 to 16.4 in 1947. As in previous years, the rate for wholesale and retail building supply dealers (34.7) was the highest in the group. It was, however, well below the 1946 rate of 41.3 for this industry.

Preliminary injury-frequency rates for the various classifications of mining and quarrying furnished by the United States Bureau of Mines were generally higher than the rates for most manufacturing industries. Anthracite mining with a rate of 83.4, ranked near the top of the highest-rate group of industries. The more extensive bituminous-coal mining industry had a lower rate, 59.8, but this also was considerably higher than the rates for most manufacturing industries.

In the metal-mining group, the frequency rates for iron mining (24.5), gold-placer mining (33.5) and copper mining (44.7) were within the general range of rates for the manufacturing industries. The small gold-silver mining industry, however, had the highest rate recorded for any industry—108.4.

Cement quarries had the lowest injury rate (16.1) among the various quarry classifications. Limestone, the largest of the quarry classifications, had a rate of 44.6.

Injury Severity

Although the injury-frequency rate is generally accepted as the most useful measure of injury experience, some measure of the relative severity of the injuries sustained is also recognized as essential for the complete evaluation of any injury record. The standard severity-rate [3] has long been the yardstick most widely used for this purpose. In recent years, however, the significance of this rate has been seriously questioned. The principal criticisms have been that the severity of an injury cannot logically be related to the amount of time worked and that the method of computation makes it, in effect, merely a weighted frequency rate rather than a true measure of injury severity. Inasmuch as it expresses the total time charges, which in turn represent the economic consequences of the injuries, in terms of the actual time worked, it should be designated, more properly, as an operating cost measure. In this capacity it is useful in evaluating the economic loss experienced in a plant or industry as a result of work injuries.

As an accurate indicator of variations in the actual severity of injuries, the disability distribution offers obvious advantages. Its computation is simple, involving only the classification of the injuries into well-defined groups and the computation of simple percentages. This avoids the introduction of any artificial or extraneous factors

[3] The severity rate is the average number of days lost, because of disabling work injuries, per 1,000 employee-hours worked.

which might alter or confuse its meaning. Chief disadvantages are that it is somewhat cumbersome to use, inasmuch as a complete comparison requires reference to several sets of figures, and that it may not be entirely satisfactory when applied to small groups of injuries.

The most-favored single measure of average injury severity at the present time is the average time charge per disabling injury. This is computed by adding the amount of actual time lost because of temporary-total disabilities and the standard time charges for deaths and permanent impairments, and dividing the total by the number of injuries. It is most commonly referred to as the severity average or the average time charge.

In general, the severity of injuries reported in the manufacturing industries was less in 1947 than in 1946. The proportion of fatalities and permanent-total disabilities was unchanged at 0.3 percent of the total volume of injuries. The proportion of permanent-partial disabilities, however, dropped from 4.9 percent in 1946 to 4.4 percent in 1947, and the average time charge for these disabilities fell from 938 to 863 days. The average number of days lost per temporary-total disability also declined from 17 to 16 days. These shifts were reflected in the severity average, which dropped from 82 days per injury in 1946 to 73 days in 1947, and also in the severity rate, which dropped from 1.6 to 1.4.

The highest ratio of time lost because of work injuries in any of the reporting industries was 10.6 days per 1,000 employee-hours worked, in stevedoring. This extremely high severity rate reflected the industry's high frequency of injuries, coupled with a high average time loss for temporary disabilities (28 days per case), and a high average time charge for permanent-partial disabilities (1,553 days). Other industries with unusually high severity rates included logging (9.7), cut stone and cut-stone products (6.0), heavy-engineering construction (5.4), and sawmills (5.3). In each of these industries a comparatively high frequency rate was coupled with a higher-than-average ratio of fatalities.

One of the highest severity averages, 203 days per disabling injury, was for the iron and steel industry. In this industry 1.7 percent of all reported disabilities were fatalities or permanent-total disabilities, and 7.0 percent were permanent-partial disabilities. The vegetable- and animal-oils industry also had a high ratio of fatalities (1.4 percent) and of permanent-partial impairments (5.5 percent) which gave it a severity average of 181 days per disability. Other high severity averages included: 164 days per disability for the paving and roofing materials industry; 162 for cut stone and cut-stone products; 150 for the electric light and power industry; and 146 for stevedoring. High ratios of fatalities or high average time charges for permanent-partial impairments were primarily responsible for each of these high severity averages.

The survey reports indicated that 80 percent of all permanent-partial disabilities experienced by manufacturing workers in 1947 were cases involving the loss or impairment of a hand or of one or more fingers. Foot and toe cases accounted for 7 percent of the total; eye cases, for 4 percent; arm cases, for 3 percent; leg cases, 2 percent; and other parts of the body, 4 percent.

In the metal-furniture, the stamped and pressed metal-products, the wooden-container, and the motor-vehicle parts industries over 90 percent of all permanent-partial disabilities were impairments to hands or fingers. In contrast, only 32 percent of the permanent impairments in the gas distribution industry and 41 percent of those experienced in stevedoring affected these members. Foot and toe impairments were particularly prominent in the steam-fittings industry, heavy-engineering construction, and stevedoring. Relatively high proportions of eye impairments were reported in plate fabricating, saw and planing mills, and forging operations. Arm impairments accounted for 13 percent of all permanent disabilities in dyeing and finishing, and 11 percent in streetcar and bus operations. Leg impairments constituted less than 10 percent of the permanent disabilities in all of the manufacturing industries except logging, but assumed greater relative importance in gas distribution, bus and streetcar transportation, and wholesale and retail distribution of dairy products.

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British Labor under the Labor Government

Part II: Position and Role of Trade-Unions

JEAN A. FLEXNER[1]

AN ECONOMY GEARED TO FULL EMPLOYMENT, the Labor Party's assumption of office, the nationalization of basic industries, and the national postwar economic crisis have brought British unions new responsibilities. Government has had to appeal to its trade-union backers to support policies that are at variance both with socialist tradition and with its immediate election program. The economic crisis, unforeseen in 1945, has necessitated continuation for 2½ years of wartime restraints on strikes, labor mobility, wage increases, and consumption.

Construction and the export industries (still under private ownership, except for coal) have required additional labor, more hours of work, and greater intensity of effort, and have asked for relaxation of longstanding trade-union rules and practices in order to increase productivity. In return, they have not been able to offer as much in pay, consumers' goods, safe and attractive workplaces, and other incentives as labor would like to have. Yet the response on the part of both individual workers and unions has been—all things considered—extraordinary.

During the decade 1938–48, British unions increased their membership and their influence on national life. Securely established as collective bargaining agents even before World War I, their field of bargaining is industry-wide and nation-wide. They speak with authority for the wage earners of Britain on all Government social and economic policies. Employers are also highly organized both in trade federations and in a national body. Both private employers and nationalized industries generally deal with unions on all matters affecting wages, hours, terms of employment, job assignments, disputes, and grievances. They also consult with employee and union representatives on trade and managerial problems.

Union leaders are conscious of responsibilities of an entirely new character and magnitude, not only toward their own members but also toward the community. To reconcile this wider responsibility with active prosecution of the members' interests at a time which is highly favorable to pressure-group tactics is their leading problem. If increases in productivity are large enough, they believe that both the national and the group interests can be satisfied. Local groups, however, sometimes oppose the measures necessary to increase productivity.

Membership and Political Influence

Trade-union membership at the beginning of 1947 totaled 8.7 million, the highest on record, compared with 6.1 million at the beginning of 1939, an increase of 42.6 percent. Trades Union Congress membership in 1947 was 7.5 million, compared with 4.7 million at the earlier date—a rise from 77.1 to 86.5 percent of the total.

In 1947, 48 percent of the gainfully employed were organized, and 42 percent were members of TUC unions. Since the gainfully employed include employers, managers, and self-employed, and since separate figures for wage earners are not available, this figure somewhat understates the proportion of the "organizable" group that were union members.

The most striking increases in TUC membership between 1939 and 1947 occurred among road, dock, and general labor, and in agriculture, metals, teaching, and national and local government services. With the reaffiliation of unions of civil servants in 1946, after repeal of the 1927 Trade Union and Trade Disputes Act, 350,000 members returned to TUC. A concentration of member-

[1] Of the Bureau's Office of Foreign Labor Conditions.

ip in the larger unions also took place during his period. At the beginning of 1939, 72 percent TUC membership was in unions with 25,000 more members and 49 percent in very large nions with 100,000 or more; by 1947, these roportions had grown to 84 percent and 67 per-nt, respectively. Individual unions which ained most in numbers and prestige were the nion of General and Municipal Workers (417,000 795,000), the Transport and General Workers' nion (634,000 to 1,230,000), Amalgamated ngineering Union (334,000 to 723,000), Electri-l Workers (64,000 to 162,000), and Shop and istributive Workers (183,000 to 374,000). A onfederation of unions affiliated with TUC, in he metal trades and shipbuilding, brought ogether for purposes of collective bargaining 1¼ illion wage earners.

The bulk of the Labor Party's membership and nds come from trade-unions. Trade-union membership in the Labor Party almost doubled etween 1939 and 1947, nearly the whole gain ccurring after the repeal of the Trades Union and Trade Disputes Act in 1946.

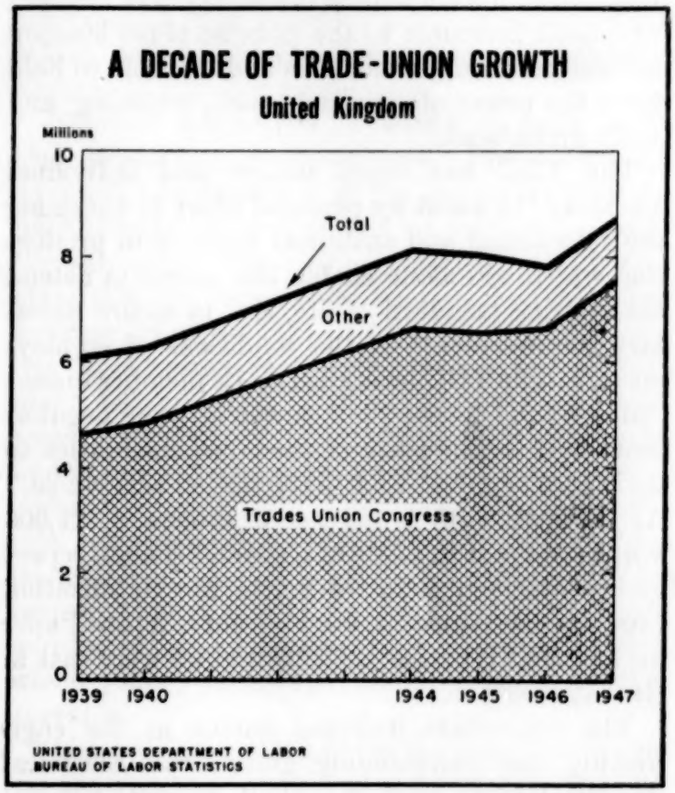
	Labor Party membership: Total	*Trade-union membership*	*Percent of total*
1939	2, 663, 067	2, 214, 070	83. 1
1946	3, 322, 358	2, 635, 346	79. 3
1947	4, 685, 659	4, 031, 434	86. 0

The effect of the repeal was to permit unions by majority vote to contribute to political funds, and to require individual members who objected to such contributions to "contract out" of payment into the fund. Formerly, the political levy could be deducted from dues only on written authorization.

At the annual Labor Party conferences, the trade-unions cast votes proportional to their political contributions. The number of trade-unionists sitting in Parliament as Labor Party members rose from 80 (out of 152) after the 1935 election to 117 (out of 393) after the 1945 election, but the proportion has dropped from 53 to 30 percent.

Ernest Bevin (former general-secretary of the Transport and General Workers' Union) is almost the only trade-union leader who stepped from trade-union activities directly into an important Government post. Generally speaking, a career in Parliament is a necessary preliminary to participation in the Government, and such a career is not compatible with carrying on the duties of a full-time trade-union official. Other trade-unionists who held posts under the Labor Government are George Isaacs, Minister of Labor (Printers); James Griffiths, Minister of National Insurance (Mineworkers); George Tomlinson, Minister of Education (Weavers); and Aneurin Bevan, Minister of Health (Mineworkers).

The formal relationship between the Trades Union Congress and the Government (Labor, Coalition, or Conservative) is channeled through the National Joint Advisory Council, on which the British Employers' Confederation has equal representation with the TUC (17 on each side).[2] Owing



to the Labor Party's dependence on the trade-unions for funds and membership, and to the large bloc of trade-unionists in Parliament, the Labor Government is sensitive to trade-union opinion and pressures. This is particularly true in regard to economic and social measures affecting the distribution of the national income, the status of the worker and the union, and control over the

[2] See Extent of Collective Agreements in 7 European Countries, Monthly Labor Review, June 1947 (p. 1025) or Serial No. R. 1893.

job. On many of these issues, however, the trade-unions themselves are divided.[3]

TUC and Inflation Controls

The support which the TUC general council has given the Government's wage-price policies and, in fact, the Government's policy on these matters have been qualified by the need to conciliate the rank and file and a strong left-wing element within the trade-unions. The latter group insists that price stabilization can be achieved by direct price controls and limitations on profits, rather than by abating wage increases. The various pronouncements of both the Government and the TUC stop short of advocating compulsory wage stabilization; but they encourage negotiation and bargaining, and emphasize the necessity of creating conditions favorable to the exercise of moderation and restraint, e. g., subsidies and controls to hold down the prices of essential goods, rationing, and profit limitations.

The TUC has urged unions and individual members "to assist by personal effort in obtaining the substantial and sustained increase in production which will alone enable the unions to defend the existing standard of life, and to secure necessary improvements in the conditions of employment." The TUC has called on its member unions "to continue to use their power in wage negotiations with a full sense of their responsibilities to their own members and to the nation as a whole." At a March 1948 conference of unions, 5,421,000 votes were cast in favor of a general council report giving qualified endorsement to the stabilization program contained in the February White Paper on Personal Incomes; 2,032,000 votes were cast in the negative.[4]

The opposition included unions in the engineering and shipbuilding group, the Electrical Trades Union, and the Civil Service Clerical Association—all unions with pending wage claims. The Amalgamated Engineering Union defended its claim in its Monthly Journal on the ground that the machinists' economic value to the nation was not fully met by the existing wage levels, and that "no Executive authority can withstand the pressure for higher wages [from the rank and file of their membership] if the cost of living continues to increase." Individual unions obviously find it hard to modify demands in accordance with general policies formulated by the top leadership or to translate the dictates of the national emergency into terms acceptable to their memberships.

TUC and Workers' Control of Industry

Opposing concepts of the trade-union role in relation to the control of industry are found within the ranks of the TUC. Viewpoints akin to the Guild Socialism of the 1920's are prominent in present discussions over nationalized industries. One group advocates direct participation by the union in the management of industry; the other is content that nationalized industries be run for the benefit of the community, in consultation with the unions involved.

The Report on Post-War Reconstruction, adopted by the TUC in 1944, demanded a voice for workpeople in the conduct of a public industry, but at the same time held that, to preserve the trade-union's independence of action, their representatives should sever their formal trade-union connections on appointment. The same report asked for consultative machinery, at all levels, and for continuation of the collective agreements in nationalized industries. The Labor Government has followed this policy.

With some variations in language—which may or may not portend real differences in future policy—the Nationalization Acts for coal, transport, civil aviation, electricity and gas provide for management by semi-autonomous boards. The boards must consult with the unions representing workers in these industries, regarding terms and conditions of employment and other matters of interest to employees. The acts do not, however, provide for representation of trade-unions as such on the boards, although one or two prominent trade-unionists have been appointed to each.[5]

Resolutions attacking the indirect method of trade-union participation in nationalized industries were presented at the annual congresses of several trade-unions (notably the engineering

[3] For a discussion of relationship between trade-unions and the present government in a historical setting see Margaret Cole, British Trade Unions and the Labor Government, in Industrial and Labor Relations Review, July 1948 (pp. 573-579).

[4] For details on wage-price policies, see Great Britain: Wage Trends and Wage Policies, 1938-47, and Supplement February 15, 1948, Bulletin No. 934.

[5] For example, when Sir Joseph Hallsworth was appointed to the National Coal Board he resigned his posts on the Trades Union Congress general council, and on the Governing Body of the ILO (as workers' representative).

trades, the railways, and the post office workers) and introduced by their representatives at congresses of the TUC and of the Labor Party. At Southport, in 1947, the TUC passed a resolution asking the Government to "provide for the fullest participation of all sections of workers, through their trade-unions, in the direction and management of nationalized industries not only in places of employment but on district and national boards." The general council, however, reserved the right to consider the matter further.

The unions that had sponsored this resolution renewed their attack, with reference particularly to the nationalized mines and railways, at Scarborough (Labor Party Conference, 1948). Although the general secretary of the Railwaymen was highly critical of the administration of nationalized industries, union leaders from the Mineworkers and the Transport Workers opposed the resolution, which was remitted to the Party's national executive for discussion with the TUC.*

Joint Consultative Machinery. Labor's request for joint consultation (as distinguished from direct control) has been met, since nationalization of mines and electric power, by agreements between the managing board, or authority, and the unions concerned to set up, or to continue, machinery at national, district, and local levels. The coal agreements provide for a national as well as divisional, area, and colliery consultative councils. The electric power agreement provides for national and district joint councils and for works committees.

In the coal industry, conciliation machinery to handle disputes and grievances also exists, distinct from the consultative machinery at the pit, district, and national levels. Indeed, the multiplicity of coal industry committees may actually interfere with their effectiveness by causing diffusion of effort and interest.

Joint consultation on production problems at the factory level has been repeatedly urged by the TUC, Labor Party, and cabinet members.

The TUC 1944 report envisaged works councils or committees, in both private and nationalized industries, with very broad terms of reference involving consultation on technical, administrative, financial, and commercial policies. They were, in fact, to discuss any internal matters not coming within the scope of the regular negotiating machinery.

During the war, joint production committees actively assisted in increasing the output of munitions in more than 5,000 establishments. Despite repeated expressions of interest and concern, few such committees are still flourishing. Lacking the stimulus of war, managements and branch union secretaries alike tend to be somewhat jealous of the committees. Moreover, the worker representatives often lack the technical knowledge which is needed to improve plant lay-out and operating efficiency. Suggestions are sometimes discouraged because management seems indifferent. The Ministry of Labor gives assistance on establishing joint consultation committees when asked, and within the framework of nationally negotiated industry agreements.

Informal discussions in works councils, or in their production subcommittees, often accomplish as much unobtrusively as the more controversial joint production committees, on such problems as the salvage of waste, the conservation of scarce materials, bottlenecks in supply, better housekeeping practices, care of tools, better timekeeping, and means of reducing absences. Branch union secretaries sit in an advisory capacity with some works councils. If management decides to undertake the reorganization of a department—perhaps using industrial consultants to reallocate jobs and labor, or to introduce new machinery—trade-unions, shop stewards, and works councils' representatives are all consulted. An increasing number of firms are adopting machinery through which joint consultation may be effectively operated.

Regional Boards for Industry, established during the war, were revived in early 1946, to provide a link between the factories and Whitehall. Government departments, employers, and trade-unions are represented on these boards, four of which have trade-unionists as chairmen. The unions in the regions maintain close touch with their representatives through regional trade-union advisory councils. The Boards attempt to adjust local or regional problems concerning labor supply, unemployment, or skilled labor bottlenecks. During the electricity crisis in the winter of 1947, they allocated fuel and developed schemes

*TUC meeting September 1948 re-affirmed 1944 policy. For other developments see next issue of Monthly Labor Review.

for spreading the electricity load by staggering hours of work or by instituting a powerless day.

In the private sector of industry, outside the nationalization program, the Labor Government has set up 18 working parties, each composed of labor and employer leaders and experts, to recommend ways and means of modernizing their respective industries. The reports submitted to the Board of Trade cover a wide range of subjects: education and training; improvements in design; methods of recruiting labor and reducing turnover; safety, health and working conditions; industrial statistics; comparative efficiency and means of raising productivity. The Industrial Organization and Development Act of 1947 authorizes tripartite industrial development councils to carry on this work on a permanent basis. One such council operates in the cotton textile industry; draft proposals have been submitted for jewelry and silverware, pottery, clothing, hosiery, and knit-wear councils.

Attitude Toward Employment Controls

The unions have acquiesced in the re-imposition of controls over hiring of workers and peacetime direction of labor. However, the Ministry of Labor has administered these controls with great caution, and has relied on persuasion and efforts to find suitable places for workers in priority industries. Only in a very few instances have workers been directed to take particular jobs. Considerably greater freedom of choice and greater labor mobility prevailed in the labor market in the spring of 1948 than during the war. Between June 1945 and March 1948, about 4 million men and women were demobilized from the armed forces and resumed former jobs or entered new ones of their own choice. Many of these veterans were trained or re-trained at Government expense. In addition, 3.5 million munitions workers were released between mid-1945 and the end of 1947.

Attitude Toward Productivity

Perhaps the clearest test of reorientation lies in the unions' attitudes toward methods of increasing productivity. Government, employers, and union leaders were agreed upon the compelling urgency of such programs. Labor has been repeatedly assured that wages would benefit from gains in productivity. In the spring of 1948, unemployment was low and workers released by labor-saving arrangements could easily be absorbed in other jobs. Nevertheless, these favorable factors were balanced by the unions' traditional hostility to changes in rules, and by certain groups' vested interests in particular jobs or in customary wage differentials. The British system of joint consultation at many levels (national, trade, and factory) means gradual change. Furthermore, labor is seldom the only party responsible for inefficient practices, and restrictive practices by managements and trade associations are just as difficult to remove.

In the building industry, for example, the unions, after 2 years of discussion, agreed in October 1947 to the introduction of payment by results. However, progress was slow, partly because the employers' federations did not assist their members to install the schemes, and partly because of cutbacks in the building program. Where incentive pay was introduced, cases were reported of output rising from 50 to 100 percent. Efficiency in the building industry, it is reported, also suffers from practices in restraint of trade by various trade associations. A tripartite working party was appointed by the Minister of Works in July 1948 to inquire into the organization and efficiency of the entire industry. The proposal was welcomed by the unions, but attacked by the national building trades employers' federations.

The cotton textile industry, spearhead of Britain's present export drive, is acknowledged as long overdue for technological renovation. The first postwar plans for the industry contemplated large-scale reequipment of both spinning and weaving sections. But new machinery is difficult to obtain because of the many competing demands for steel and the immediate gains to be realized from the export of textile machinery. Emphasis has shifted to getting maximum production on existing machinery, and reducing labor requirements. Startling improvements in output have been obtained in certain mills by means of careful job studies and reassignment of labor, accompanied by changes in wage-payment methods. However, before such changes can be instituted, or even studied, agreement must be obtained from union representatives and from the employees involved. Demonstrations such as that in the cardroom of

he Musgrave Mill are breaking down resistance; utput per man-hour was increased 39 percent, lthough the mill was considered relatively effi- ient before the experiment.[6] Operatives in other ills of the same company have asked for applica- ion of the same system. However, in Lancashire s a whole, unions and operatives are still slow to elcome change.

A tripartite commission in the weaving section, n March 1948, submitted its recommendations or revision of the weavers' wage system and for new staffing plan, for the purpose of increasing ncentives.[7] Even though a majority of weavers ill probably gain, certain groups of workers will e unfavorably affected. This is retarding adop- ion of the recommendations.

There is general dissatisfaction with the effi- iency of the British coal industry. The natural echnological handicaps are well known: narrow, loping seams; inadequate underground transpor- ation systems; poor mine lay out; too much non- productive labor. The widely entertained hopes hat nationalization would facilitate technical re- organization and stimulate greater effort by the miners have not been entirely fulfilled. Progress has been made, although total output and output per manshift are still below prewar, in spite of greatly increased mechanization since prewar.

	Output in million tons		*Average output per man-shift*
	Annual	*Average weekly*	
1938	227	4.353	1.14
1944	191	3.688	1.00
1945	182	3.506	1.00
1946	189	3.646	1.03
1947	197	3.782	1.07
1948 [1]	106	4.080	[2] 1.10

[1] Six months.
[2] Week ending May 29, 1948.

The reasons for this state of affairs are much debated. Some miners blame the failure to introduce direct workers' control in the industry. Colliery managements blame the Coal Board and the union for curtailing their authority. Sir Charles Reid, author of the report which showed how the industry must be technically reorganized, recently resigned from the Coal Board blaming the Board's over-centralized organization. He also stated his belief that "with the manpower [8] and the machinery now in the industry at least 30 million extra tons of coal per annum could be produced, provided that absenteeism were reduced to prewar level, manpower put where it could be most effectively used, and men and managers alike were inspired to give their best service to the country."

The National Union of Mineworkers, in numerous instances, backed up the National Coal Board in its decisions made for the purpose of increasing output, which local groups of miners had resisted. For example, at Grimethorpe, Yorkshire, in August 1947 a group of miners refused to increase the daily stint of coal cutting ordered by the Coal Board and confirmed by the decision of a joint committee appointed under the district conciliation machinery. Other pits joined in sympathetic walk-outs. The Miners' Union vigorously condemned the strikers, and eventually the men returned to work. However, the old stint remained in effect. In May 1948 another group of Yorkshire miners, although assured of jobs at nearby pits, staged a sit-down strike in protest against the closing of their pit at Waleswood which the Coal Board had rated uneconomical to operate. With union backing, the Waleswood pit was closed as scheduled.

Attitude on Strikes

Most of the strikes in the war and postwar periods have been unofficial and unauthorized. The TUC and the BEC (British Employers' Confederation) agreed to extend wartime compulsory arbitration beyond the date it would have lapsed (February 24, 1946), with the understanding that the question would be reviewed as soon as either side wished compulsory arbitration to be dis-

[6] Report on Labor Redeployment in the Musgrave Mill Cardroom. The Cotton Board, March 1948.
[7] Great Britain Ministry of Labor and National Service. Cotton Manufacturing Commission—Interim Report. London, 1948.

[8] The manpower position in coal, compared with prewar, is as follows:

	Average number (in thousands)	
	On colliery books	*Actually employed*
1938	782	(No data)
1944	710	642
1945	709	629
1946	697	626
1947	712	649
1948 (first 5 months' average)	723	676

The average age of the current labor force is higher than prewar. It is difficult to recruit British youths for the mines, and the father-and-son mining tradition is disappearing.

continued.[9] Up to July 1, 1948, neither side has requested a review. On the whole, labor, employers, and government agree that the system is still necessary, and that the benefits outweigh the disadvantages. Resolutions censoring compulsory arbitration in peacetime were debated at the annual trade-union congresses in 1946 and in 1947 (in the latter year the powerful machinists' union introduced the resolution), but the matter did not come to a vote.

National union officers, as well as TUC officials, have repeatedly denounced unauthorized stoppages and made great efforts to get strikers back to work. Several unions, like the miners, have taken disciplinary action against strikers. The National Union of General and Municipal Workers in August 1947 threatened to expel 36 striking bus drivers; the Transport and General Workers' Union at its 1947 convention gave notice that it would proceed similarly. But while such action is feasible where small groups are involved and the issues are clear cut, a union naturally hesitates to take drastic measures if a large number of members rebel, or if serious inequities underlie the strike.

On several strikes of transportation workers, the Labor Government used troops to handle perishable or badly needed food supplies. In June 1948, more than 20,000 dockworkers were idle through an unauthorized strike; troops were called to unload ships; Prime Minister Attlee, in a special broadcast, appealed to the strikers to return; and a state of emergency was declared. A substantial number of strikers having already indicated willingness to return, the strike ended. The union is proceeding to negotiate on the original grievance.

Even though opposed by trade-union officials and the Labor Government, unauthorized strikes resulted in some economic gains for the workers who engaged in them. Moreover, such strikes constitute a challenge to the top union officials similar to the challenge of the shop stewards' movement in 1917–18. However, without the restraints imposed by the unions' discipline and sense of responsibility toward the Government strategically placed groups of workers could hold out for a great deal more, thereby disrupting the national recovery effort.

A few strikes in the postwar period have had official union sanction: a strike of hotel workers in October 1946, backed by the Union of Municipal and General Workers, was not considered illegal because it arose over union recognition—a question that the National Arbitration Tribunal declined to arbitrate. The strikers won their demands, full recognition and dealing with the union. In April 1948, a strike of 20,000 automobile body workers was called by the Vehicle Builders Union, after negotiations for a wage increase had been referred by the Minister of Labor to the National Arbitration Tribunal. When the employers agreed to resume negotiations, the strike was called off without prosecutions.

The total man-days lost in strikes has been extremely low, compared with the years following World War I.

Man-days lost (in thousands)		*Man-days lost (in thousands)*	
1918	5,880	1945	2,840
1919	34,970	1946	2,158
1920	26,570	1947	2,433
1921	85,870	1948	[1] 3,172

[1] Annual rate based on first 6 months.

Employers and labor generally have observed the voluntary procedures for negotiating agreements and settling disputes and have accepted the decisions of arbitrators. The success of both Coalition and Labor Governments in managing scarce resources and supplies has resulted in a pooling of effort by all groups to meet a national emergency, the seriousness of which is widely appreciated.

[9] The conditions of Employment and National Arbitration Orders 1940–44 will continue in force until December 1950 unless altered, by virtue of S. R. and O. 1945 No. 1260, issued December 20, 1945, under Section I Supplies and Services (Transitional Powers) Act, 1945. For a discussion of the compulsory arbitration system in Great Britain, see Settlement of Industrial Disputes in Foreign Countries, Monthly Labor Review, August 1946, or Serial No. R. 1848; also Arbitration of Labor Disputes in Great Britain, by Jean A. Flexner, in Industrial and Labor Relations Review, April 1948 (pp. 421–430).

Manpower Needs of the Expanded Defense Program

HAROLD WOOL and HYMAN L. LEWIS [1]

IN A SERIES OF MEASURES enacted last spring, a sizable expansion of the national military establishment was authorized for the fiscal year 1949. Under the Selective Service Act of 1948 (Public Law 759, 80th Cong.), the Congress provided for a peacetime draft and a net addition of over a half million men to the armed forces. Increased appropriations were also made for various types of military procurement and for additional civilian personnel in defense activities. In the aggregate, national defense expenditures during the fiscal year 1949 were expected to rise by 1.5 billion dollars, or 14 percent above those for the preceding year.[2]

The expansion occurs at a time when a very high percentage of the labor force is already employed, and when substantial backlogs of demand, both at home and abroad, still exist in important sectors of the economy. The situation in this respect is in sharp contrast with that prevailing at the time of the enactment of the National Defense Program in 1940, when 8 million workers were unemployed and when considerable productive capacity was not being utilized. For this reason, there has been considerable interest in the adequacy of the Nation's labor supply in the year ahead, and in the potential problems of manpower recruitment which might arise as the present program develops.

Appraisal of the requirements of the expanded defense program indicates that about 1 million additional workers, both military and civilian, will be needed by the end of the 1949 fiscal year. The supply of labor is expected to increase sufficiently, on an over-all basis, to meet these demands, although shortages may develop in particular types of work and in certain localities.

In arriving at this conclusion, estimates have been prepared of the number of men required by the armed forces and of the pool of manpower which will be available under the terms of the Selective Service Act of 1948. These estimates have been related to the additional requirements of the military for civilian manpower and to prospective changes in labor supply and demand in the economy as a whole.

Manpower Requirements of the Armed Forces

The Selective Service Act of 1948 authorizes the armed forces to achieve an average daily strength of 2,167,000 persons on active duty. Appropriations, however, permit a strength of 1,948,000—about 200,000 under the authorized level. In the present study, it is assumed that the lower figure will be realized during the 1949 fiscal year, and that the full complement authorized by the Selective Service Act will be achieved early in the next fiscal year.

Since the net strength of the armed forces was slightly in excess of 1,400,000 men at the beginning of fiscal 1949, achievement of the indicated levels will require the net addition (i. e., net withdrawals from civilian life) of more than 500,000 in fiscal 1949 and more than 200,000 in the year following.

A much greater number of civilians will actually have to be recruited, however, because of turn-over in the armed forces personnel due to expiration of enlistments. After allowing for anticipated reenlistments, the *gross intake* from civilian life will have to be about 900,000 during the fiscal year 1949, and about 700,000 in the fiscal year 1950. It was in order to meet these needs that the present Selective Service Act was passed.

Under the terms of the new law, every civilian male between the ages of 18 and 26 (with a few minor exceptions) was required to present himself for the initial registration on specified days between August 30 and September 18. Thereafter, in a continuing registration, men are required to register as they reach the age of 18. Only those who have reached 19 and who have not yet passed 26, however, are liable for military service.

[1] Of the Bureau's Branch of Occupational Outlook.

[2] Statement by the President reviewing the 1949 Budget, August 15, 1948, page 5.

A large proportion of the men in the subject age groups are exempted or deferred either by the act or by regulations promulgated under it. Among the major categories of men not eligible for the draft are most veterans, married men and those with dependents, persons with certain personal deficiencies and defects, men who were members of specified Reserve units at the time of the law's enactment (June 24, 1948), and high school students under the age of 20. In addition, full-time students in schools of higher education cannot be inducted until the end of the academic year. Exempt also are ministers, theological students, sole survivors in families sustaining war losses, conscientious objectors who meet certain requirements, and a limited number of reservists who may enroll under specified conditions after June 24, 1948.

The act provides substantially the same procedure for occupational deferments as was followed in the prewar draft. It authorizes the President "to provide for the deferment * * * of persons whose employment in industry, agriculture, or other occupations * * * or whose activity in study, research, or medical, scientific, or other endeavors is found to be necessary to the maintenance of the national health, safety, or interest." (Sec. 6 (h), P. L. 759.) The law permits no group deferments; in each case the individual's status, as determined by the local board, is the governing consideration.

Special inducements are offered by the law to 18-year-olds. A limited number—161,000 in each year—may enlist for a 1-year period instead of the 21-month term provided for men who are drafted. Moreover, they are to be assigned to service in the continental United States only. The recruitment of the full complement of these 18-year-old trainees is not expected to involve any particular difficulties. In addition, some 50,000 reserve officers may be recalled to active duty, and a number of enlistments may be expected from men who are not subject to the draft, such as veterans or persons outside the draft ages.

The remainder—less than 700,000 men in fiscal 1949 and approximately 500,000 in fiscal 1950—will have to be drawn either voluntarily or by draft from among nonveterans aged 19 through 25. The number to be drafted will obviously depend upon the number who enlist. It appears currently that the selective service machinery will obtain about 250,000 in the first year, and perhaps one-fourth that number in the following year. Under present plans, all draftees are to be assigned to the Army. The Navy and the Air Force will attempt to rely exclusively on enlistments.[3] The number to be recruited are to be distributed fairly evenly throughout the year, once the draft machinery gets under way.

A recapitulation (in round numbers) of the pertinent manpower data follows:

	Fiscal 1949	*Fiscal 1950*
Withdrawn from civilian life	900,000	700,000
Under 19 or over 25	200,000	200,000
Between 19 and 25	700,000	500,000
To be enlisted	450,000	450,000
To be drafted	250,000	50,000
Returned to civilian life:		
Newly discharged veterans	400,000	500,000
Net loss to civilian life	500,000	200,000

The Selective Service Manpower Pool

To meet the requirements for 19- to 25-year-old men approximately 7¾ million civilian men were available in continental United States, at the beginning of the fiscal year 1949, according to estimates of the Bureau of the Census.[4] In addition, about a million civilian youths could be expected to attain age 19 during the fiscal year and thus become subject to selective service.

About 9 out of every 10 of the initial 19–25-year-old registrants will probably not be liable to military service at the time of registration. Some 5 million are World War II veterans, and more than a million were previously disqualified under the wartime and early postwar mental and physical standards. Of those who were not screened under the former draft law, it is estimated that about one-fourth, or approximately one-half million, will be disqualified under the relatively high peacetime standards. An additional half million men will be exempted for such reasons as marital status, membership in the organized reserves, and school attendance.[5]

[3] Enlistments in the Army are acceptable for the 21-month draft term. The other services, however, are adhering to an enlistment term of at least 3 years.

[4] The Census estimates are as of April 1, 1948, but may be accepted as an approximate measure of the number as of July 1, 1948. Source: Census release, Series P–25, No. 9.

[5] Estimates of the selective service manpower pool were prepared by the Bureau of Labor Statistics from a variety of sources and are tentative pending release of official registration and classification statistics by the National Headquarters of the Selective Service System. A detailed description of methods used in preparing these estimates may be obtained upon request.

Therefore, about 800,000 men are estimated to be immediately eligible for selective service, prior to agricultural or other occupational deferments. Another 500,000 will be eligible before the fiscal year 1949 is over, mainly from three sources: (1) Youths not attending school who will attain age 19 during the year, (2) high school students, who either graduate or attain the age of 20, and (3) college students.

Losses from the immediately eligible group because of aging of the 25-year-olds will be negligible, in view of the announced policy of inducting the older age groups first. The total pool of 19–25-year-olds available for induction at some time during fiscal 1949 may thus be estimated at 1,300,000; the year's needs from this group are about 700,000. Since agricultural and occupational deferments will be handled on an individual basis with broad latitude at the draft board level, it is not possible to estimate the probable number of such deferments.

The balance sheet for the fiscal year 1950 is similar, with both requirements and supply somewhat lower. There will be an initial pool in July 1949 of more than 500,000 19–25-year-olds, augmented by additions of nearly 700,000, for an aggregate of nearly 1,200,000. This compares with the year's needs from the pool of about 500,000.

Three important facts emerge from an examination of the supply available to the armed forces.

1. The pool of eligible manpower, before agricultural and occupational deferments, will be adequate at all times, on a Nation-wide basis, to meet the needs for enlistees and draftees, assuming that the present plans to induct new personnel in an even flow are successful. During fiscal 1949, for example, there will probably always be a margin of at least 500,000 men available in excess of scheduled demands.

2. Most eligibles will be under 21 years of age. Virtually every registrant in the upper-age brackets was screened through the draft machinery of World War II and either accepted for service or classified as IV–F. Relatively few were exempted as hardship cases, or given agricultural or other occupational deferments; of these, many would now be deferred for various reasons. As a result, hardly more than 60,000 may be found available among the 22 to 25-year groups combined and about the same number in age 21.

3. The major source of military manpower will have to be the civilian labor force, rather than the schools. Of the 1,300,000 men who will be eligible before fiscal 1949 is over, about four-fifths are either working or seeking work. Most of the others are in school and therefore cannot be drafted before May or June 1949.

The Impact on the Civilian Economy

The major problems created by military expansion include effects upon the over-all labor supply-demand situation, the present and future availability of trained men, and the educational institutions. The analysis in this section is based on the assumptions that the present full-employment situation will continue and that there will be no major revision in the anticipated requirements of the armed forces.

Over-All Labor Supply-Demand Situation. In addition to the net expansion in the armed forces of more than one-half million scheduled for the 1949 fiscal year, about 500,000 civilians will be required in government establishments and in private industries working on military orders. Of this total, about 100,000 will be needed by the aircraft industry alone in the first phase of a program to expand and modernize the air force. On the demand side, the expanded defense program will thus require the addition of a total of 1 million persons to public and private pay rolls by the end of June 1949.

Analysis of the labor-supply situation indicates that the labor force will also increase by about 1 million during the coming year, assuming that normal growth in the labor force continues and that several hundred thousand World War II veterans will leave school by June 1949.

Thus—if there is no significant change in the civilian economy's current labor demand—the national labor market may be expected to continue in relatively close balance during the year ahead. On the other hand, this apparent tightness need not preclude further expansions in industries not connected with the war program. The labor supply is still sufficiently flexible for more than normal expansion. Substantial numbers of potential workers, particularly married women without young children, may again be drawn into the labor market if demand becomes strong enough. In addition, the present level of

unemployment, which is considered relatively low for peacetime, is well above the wartime figure and is still capable of being reduced.

The Skills Situation. In the close over-all balance which thus appears likely, specific shortages may be expected to develop on a somewhat greater scale than has been true in the past few years, and serious problems may be expected in some localities. For example, an expanded munitions industry may call for a considerable number of professional and skilled workers in metalworking and related industries. In some of these occupations, the supply of experienced workers has been tight for some time.

Recruitment problems may also arise in some localities, even in occupations where no national shortages exist. The geographical shifting of workers is particularly difficult under existing circumstances. Relatively few areas have sufficient community facilities and housing to accommodate any significant in-migration of workers. Consequently, in most areas affected, major emphasis will have to be placed on more intensive utilization of the local labor supply.

The direct manpower needs of the armed forces, on the other hand, will not seriously affect the supply of skilled workers, since relatively few of those taken will have had time to acquire any substantial degree of skill or experience. This is particularly true of the enlistees, who bulk large in the present plans. It is likely that most of the volunteers will come from those just out of school, who would normally be looking for work, the unemployed (of whom there are only a few), and those not yet particularly attached to any job.

However, among the 300,000 to be drafted in the next 2 years, there may be many who are already in jobs where they are receiving valuable training. Among registered apprentices alone, there may be perhaps 50,000 nonveterans in the group subject to draft. While these numbers may seem small as against total employment, some of those affected have had considerable training and have acquired enough experience to constitute an appreciable loss to industry.

Industry generally will thus feel the draft in two ways: Loss of a substantial portion of the pool of new entrants who would normally be available for replacements or expansion, and possible loss of a smaller number of men who have had valuable training on the job. The size of the latter group will of course depend on the occupational deferment policies pursued at both national and local levels. Partially offsetting these losses will be the return to civilian life of a substantial number of newly discharged veterans—mostly over age 21—who are draft-free under present conditions.

Effect on the School System.—In a program of the present dimensions, the initial drain on the school system need not be particularly pronounced. Since high-school students are draft-exempt until they graduate or attain the age of 20, the impact of the draft will be limited largely to the college level.

The effect on college enrollments will depend partly on the extent of adherence to current schedules of inductions and expected enlistments. If the armed forces succeed in recruiting by the end of the fiscal year 1949 the full number of men for whom they now have funds, the draft boards will probably require no more than 100,000 men during the summer months. Even if the draft boards fill their entire summer quotas from among eligible college students or prospective college entrants (which seems unlikely), this would represent about 6 percent of the total male enrollment of almost 1,700,000 recorded in the fall of 1947.[6] Moreover, a half million eligible nonstudents, as well as a substantial number of high-school graduates who would not normally go on to college, will also be available during this period. Should the enlistment and drafting programs fall seriously behind schedule, however, it is of course possible that inductions might cut more substantially into the college population.

As in the case of trained men in industry, the number of college men in critical fields of study, which may be considered vital to the national security, is small relative to the total number of eligibles available. Deferment policies designed to conserve the flow of scientists and technicians into vital industries and professions would therefore not materially reduce the manpower pool.

[6] U. S. Bureau of the Census, School Enrollment of the Civilian Population: October 1947, Series P–20, No. 19.

Summaries of Special Reports

Electric and Gas Utilities: Wage Structures in 1948 [1]

PUBLIC UTILITIES are basic to modern economic life. They furnish relatively stable employment to hundreds of thousands of workers located in all parts of the country. The earnings of workers in these industries are important indicators of the general wage levels in local communities and broader economic regions. This report presents information on the earnings and supplementary benefits of workers in electric and gas utilities.[2]

Straight-time wage rates in class A and class B privately operated electric utility systems employing 101 or more workers averaged $1.35 an hour for all plant (nonoffice) workers in March–April 1948. At the same time, plant workers in privately operated gas utilities serving cities of 75,000 or more population averaged $1.29 an hour on a Nation-wide basis. These respective averages do not indicate a wage differential between comparable groups of workers, since the averages are influenced by differences in the composition of the labor force between the two industries.

Relatively few workers in each industry were paid less than 65 cents an hour; about 1 out of every 8 workers in each industry received less than $1.00 an hour. A greater proportion of the workers in electric utilities than in gas utilities, however, had hourly rates of $1.50 or more (a third compared with a fifth), suggesting that skilled workers were relatively more numerous in the former industry.

Occupational Differences

Among the key occupations studied in electric utilities, journeymen linemen comprised the largest group and averaged $1.61 an hour throughout the industry as a whole in the spring of 1948 (table 1). An average rate of $1.07 was shown for groundmen, typical of the less skilled workers in the industry. Substation operators ($1.53), meter readers ($1.18), boiler operators ($1.48), and auxiliary-equipment operators ($1.35) were other occupations employing relatively large numbers of workers. Load dispatchers, with an average of $1.94 an hour, constituted the highest paid occupational group studied.

In gas utilities, main-installation and service laborers were the largest, as well as the lowest paid, occupational category studied. Their average hourly rate, on a national basis, was $1.02 (table 2). The highest paid workers, although relatively few in number, were inspectors, with an average rate of $1.55. Appliance servicemen, the largest skilled group studied, averaged $1.43. Gas main fitters ($1.36), meter readers ($1.30), and gas plant laborers ($1.12) were other numerically important groups.

Office workers comprised a very substantial segment of the employment in both industries. In contrast to the plant occupations studied, the great majority of the office occupations were staffed by women. As cashiers in electric utility companies, women averaged 97 cents an hour; as general stenographers, $1.05; as accounting clerks, $1.23; and as clerk-typists, 92 cents. The largest group of men office workers were general clerks, with hourly rates averaging $1.28.

[1] Prepared by Kermit B. Mohn of the Bureau's Division of Wage Analysis. The collection of data for this study was directed by the Bureau's regional wage analysts. More detailed information will be provided in a mimeographed report, available upon request.

[2] The scope of this study included privately operated class A and class B electric utilities (as defined by the Federal Power Commission) employing 101 or more workers and privately operated gas utilities of cities of 75,000 or more population. Employment in those establishments furnishing both electric and gas or other services was allocated to each service, so that only those workers associated with either electric or gas service, plus a proration of workers in general departments, were included in the study of each industry.

The study of electric utilities included a total of 130 establishments employing more than 194,000 workers, and the study of gas utilities, 126 companies employing almost 58,000 workers.

Information was collected by Bureau field representatives from company records. Workers were classified on the basis of uniform job descriptions prepared by the Bureau for that purpose.

Typical women's office occupations in gas utilities, together with their average hourly rates, were cashiers, $1.05; general stenographers, $1.16; accounting clerks, $1.10; and clerk-typists, 99 cents.

Regional Variations [4]

Considerable variation occurred among the wage levels found in different sections of the country. In electric utilities, the average hourly rates for all workers combined ranged from $1.17 in the Southeast to $1.64 on the Pacific Coast. In addition to the Southeast, those regions having general wage levels below the national average of $1.35 were the Southwest ($1.21); the Border region ($1.26); the Middle West ($1.26); and the Middle Atlantic ($1.33). Those exceeding the national average included the Mountain region ($1.37); New England ($1.39); Great Lakes ($1.43); and the Pacific Coast ($1.64).

The same general regional pattern of differences tended to prevail in electric utilities when measured on an occupational basis, although the extent of the differences varied considerably among occupations. For most occupations the Southeast or Southwest had the lowest wage levels and the Pacific region the highest. The actual ranges between the lowest- and highest-paying regions were from 30 to 59 cents an hour in 24 of 27 occupations used in the comparison; the smallest spread in any of the occupations was 26 cents. By excluding the Pacific region, the ranges were considerably smaller in most cases, amounting in 9 occupations to less than 25 cents and in 13 others, to between 25 and 39 cents.

Actual wage differentials in electric utilities between the lowest and highest paying regions tended to be smaller among the more-skilled jobs than among the less skilled. For instance, on a cents-per-hour basis the spread among

[4] The regions used in this study include: *New England*—Connecticut Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Middle Atlantic*—New Jersey, New York, and Pennsylvania; *Border States*—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; *Southeast*—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee; *Great Lakes*—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *Middle West*—Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; *Southwest*—Arkansas, Louisiana, Oklahoma, and Texas; *Mountain*—Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming; *Pacific*—California, Nevada, Oregon, and Washington.

TABLE 1.—*Average straight-time hourly earnings [1] for selected plant occupations in electric utilities, by region, March–April 1948*

Occupation and sex	United States		Average straight-time hourly earnings in—								
	Number of workers	Average hourly earnings	New England	Middle Atlantic	Border States	Southeast	Great Lakes	Middle West	Southwest	Mountain	Pacific
Men											
Auxiliary-equipment operators	4,007	$1.35	$1.33	$1.39	$1.25	$1.12	$1.41	$1.23	$1.22	$1.27	$1.6
Boiler operators	4,400	1.48	1.45	1.49	1.57	1.36	1.60	1.30	1.37	1.34	1.6
District representatives	2,030	1.37	1.34	1.54	1.13	1.26	1.53	1.23	1.59	1.68	1.6
Electricians, maintenance	3,859	1.64	1.61	1.55	1.57	1.48	1.70	1.67	1.60	1.58	1.8
Groundmen	8,740	1.07	1.15	1.07	1.01	.91	1.13	1.00	1.00	1.12	1.3
Guards	691	1.24	1.22	1.23	1.27	.96	1.32	----------	.97	1.14	(2)
Janitors	3,385	1.04	1.11	1.07	.94	.73	1.13	.91	.82	1.00	1.2
Linemen, journeymen	10,989	1.61	1.59	1.59	1.50	1.47	1.63	1.48	1.58	1.61	1.8
Load dispatchers	972	1.94	2.16	1.97	1.91	1.76	2.00	1.71	1.68	1.70	2.1
Machinists, maintenance	874	1.63	1.66	1.54	1.48	1.54	1.75	1.57	1.57	1.52	1.8
Maintenance men, general utility	1,221	1.45	1.57	1.48	1.35	1.45	1.49	1.29	.99	1.48	1.5
Mechanics, automotive	1,796	1.52	1.43	1.52	1.44	1.43	1.53	1.51	1.42	1.49	1.7
Mechanics, maintenance	2,362	1.53	1.57	1.50	1.63	1.42	1.56	1.42	1.53	1.54	1.6
Metermen, class A	2,150	1.59	1.53	1.61	1.65	1.46	1.60	1.53	1.58	1.55	1.7
Metermen, class B	2,154	1.36	1.32	1.36	1.36	1.20	1.41	1.31	1.18	1.33	1.6
Meter readers	5,283	1.18	1.15	1.15	1.22	1.08	1.21	1.13	1.09	1.13	1.3
Patrolmen	482	1.43	1.33	1.45	1.56	1.40	1.35	1.49	1.17	1.24	1.7
Servicemen, appliance	3,103	1.45	1.42	1.39	1.34	1.40	1.49	1.39	1.40	1.35	1.6
Stock clerks	2,139	1.24	1.23	1.21	1.30	1.26	1.28	1.17	1.02	1.20	1.6
Substation operators	5,883	1.53	1.51	1.49	1.53	1.19	1.64	1.49	1.23	1.47	1.6
Switchboard operators, class A	2,439	1.60	1.49	1.66	1.54	1.39	1.73	1.47	1.53	1.56	1.7
Switchboard operators, class B	1,343	1.37	1.30	1.40	1.35	1.11	1.37	1.38	1.29	1.16	1.7
Trouble men	3,576	1.63	1.76	1.69	1.60	1.57	1.62	1.55	1.49	1.62	1.8
Truck drivers	1,590	1.32	1.32	1.40	1.13	1.04	1.37	1.30	1.12	1.31	1.5
Truck driver-groundmen	2,902	1.26	1.34	1.29	1.07	1.10	1.30	1.18	1.25	1.18	1.5
Turbine operators	2,486	1.49	1.45	1.47	1.33	1.38	1.61	1.36	1.45	1.59	1.6
Watch engineers	1,561	1.81	1.89	1.92	1.96	1.57	1.93	1.63	1.66	1.61	1.8
Watchmen	532	1.07	1.18	1.06	.93	.89	1.20	1.08	.90	1.04	1.2
Women											
Janitors	408	.81	.81	.80	.77	.65	.84	.77	(2)	(2)	(2)

[1] Excludes premium pay for overtime and night work.

[2] Insufficient number of workers to justify presentation of an average.

groundmen amounted to 47 cents (91 cents compared with $1.38), and among linemen, 40 cents ($1.47 compared with $1.87). On a percentage basis, however, the actual differential for linemen amounted to about 27 percent. In contrast, the differential among groundmen was about 52 percent. Conversely, the wage spreads between the less-skilled and more-skilled jobs were greater in regions with the lowest pay levels than in those with the highest levels. A comparison of rates for groundmen and linemen within the individual regions shows that the differential between the rates for these jobs varied from about 36 percent in the Pacific region to 62 percent in the Southeast. This differential tended to become smaller as the average rates for groundmen became higher.

In gas utilities, the regional averages for all plant workers combined ranged from 99 cents in the Southeast to $1.48 on the Pacific Coast. The averages in the Great Lakes region ($1.38) and the Middle Atlantic ($1.30), in addition to the Pacific Coast, exceeded the national average of $1.29. Workers in New England averaged $1.28, in the Border region $1.24, in the Middle West $1.23, and in the Southwest $1.03.

Among the individual occupations, the Pacific Coast usually had the highest levels and the Southeast the lowest. Again, however, the extent of the differences appeared to vary inversely with the skill of the occupation, the differentials being greatest among the least-skilled jobs. For instance, main-installation and service laborers averaged 75 cents an hour in the Southeast and $1.25 on the Pacific Coast, representing a difference of 67 percent. On the other hand, appliance servicemen averaged $1.22 an hour in the Southwest and $1.59 on the Pacific Coast—a differential in pay of about 30 percent.

Between the same jobs the differentials within a region ranged from 21 percent in New England to about 73 percent in the Southeast. In general, the skill differential varied inversely with the general wage level, the regions with the highest levels tending to have the smallest differentials.

Supplementary Wage Practices

All except 5 of the 128 electric utility companies, for which data were available, had formalized their wage structures so that rates were set in advance for specific occupations. In the other 5 instances, rates were presumably established on an individual worker basis. The 123 companies with formal

TABLE 2.—*Average straight-time hourly earnings [1] for men workers in selected plant occupations in gas utilities, by region, March–April 1948*

Occupation	United States [2]		Average straight-time hourly earnings in—							
	Number of workers	Average hourly earnings	New England	Middle Atlantic	Border States	Southeast	Great Lakes	Middle West	Southwest	Pacific
Auxiliary-equipment operators, gas production	897	$1.41	$1.30	$1.46	$1.20	$1.05	$1.47	$1.30	$1.18	$1.50
Back door and charger operators	167	1.36	1.36	1.39	(3)	(3)	1.49	1.29	----	----
Boiler operators (firemen)	615	1.36	1.28	1.40	1.23	.88	1.48	1.43	----	1.51
Carpenters, maintenance	123	1.47	1.44	1.47	1.39	(3)	1.60	(3)	1.27	1.60
Drip pumpers	180	1.28	1.23	1.30	1.35	(3)	1.32	(3)	----	(3)
Electricians, maintenance	189	1.53	1.46	1.58	1.36	----	1.66	1.53	(3)	1.52
Engine-room operators	631	1.42	1.42	1.50	1.37	1.17	1.36	1.41	1.33	1.53
Gas-main fitters	2,619	1.36	1.29	1.34	1.27	1.21	1.43	1.36	1.13	1.54
Gas-main fitters' helpers	1,672	1.15	1.16	1.14	1.09	.88	1.25	1.08	.97	1.35
Gas makers	689	1.44	1.36	1.47	1.43	1.10	1.53	1.34	----	1.51
Heatermen	165	1.46	1.30	1.57	(3)	(3)	1.51	1.36	----	1.48
Inspectors	277	1.55	1.59	1.53	(3)	1.38	1.55	----	1.52	1.77
Installers, gas meter	1,426	1.41	1.33	1.39	1.50	1.27	1.34	(3)	1.24	1.55
Janitors	604	1.08	1.09	1.07	1.04	.80	1.17	.89	.80	1.27
Laborers, gas plant	2,914	1.12	1.13	1.14	.99	.78	1.29	1.05	----	1.17
Laborers, main installation and service	4,448	1.02	1.13	1.05	.98	.75	1.13	1.08	.85	1.25
Maintenance men, general utility	562	1.43	1.41	1.48	1.34	1.23	1.47	1.34	1.24	1.50
Mechanics, automotive	404	1.47	1.38	1.47	1.53	1.30	1.51	1.53	1.26	1.63
Meter readers	2,366	1.30	1.29	1.30	1.33	1.03	1.34	1.42	1.04	1.40
Pipefitters	366	1.46	1.45	1.47	1.39	(3)	1.49	(3)	(3)	1.51
Pusher operators	197	1.34	1.23	1.42	1.03	----	1.49	(3)	----	1.32
Repairmen, gas meter	1,374	1.48	1.46	1.54	1.36	1.34	1.48	1.38	1.22	1.58
Repairmen's helpers, gas meter	515	1.17	1.19	1.22	1.05	.93	1.21	(3)	.95	1.39
Servicemen, appliance	3,830	1.43	1.37	1.39	1.49	1.30	1.45	1.36	1.22	1.59
Servicemen, regulators	446	1.46	1.26	1.47	1.51	1.28	1.54	1.53	1.30	1.69
Truck drivers	574	1.30	1.26	1.29	1.19	(3)	1.43	1.26	1.08	1.55
Watchmen	224	1.13	1.21	1.09	1.22	.82	1.23	1.22	(3)	(3)

[1] Excludes premium pay for overtime and night work.
[2] Includes data for Mountain region.
[3] Insufficient number of workers to justify presentation of an average.

rate structures were almost equally divided between those having a single rate for each job and those having a range of rates under which recognition of length of service, merit, and other factors could be given to individual workers.

Similar conditions existed in the gas utility industry. Formal structures were found in 118 of the 125 companies for which this information was obtained; the proportions with single rates or ranges of rates were also about equally divided on a Nation-wide basis. In both industries, differences in these proportions existed within the various regions.

The 40-hour week was by far the most common regular work standard in both electric and gas utilities. Only 8 of 130 electric companies studied and 16 of 126 gas companies had regular work schedules other than 40 hours. All of these were in excess of 40, although only 1 (a gas utility company) had a schedule of more than 48 hours.

Three or more shift operations were found in all except 5 of the electric companies and in all but 24 of the gas companies. However, these extra shifts were generally limited to certain phases of the work, such as generation of electricity and manufacture of gas. As a result, only relatively small proportions of the total number employed were working on the extra shifts. Among the electric companies, 9 percent of the workers were found on the second shift and 8 percent on the third or other shift, with these proportions fairly stable in each of the regions. The proportions of workers on extra shifts in the gas industry, for the country as a whole, were slightly smaller, primarily because of the very small numbers of workers required for extra-shift work in the natural gas areas. Only 1 percent of the workers in the Southwest were found on the second and third shifts, respectively, and only 2 percent in the Mountain region.

The extent of the payment of premiums for shift work differed between the two industries. About 46 percent of the electric companies and approximately 60 percent of the gas companies operating extra shifts granted additional pay. In practically all cases the differential consisted of a uniform addition in cents-per-hour to the first-shift rates. In a majority of the companies with shift differentials in each industry, the second-shift premium amounted to less than 5 cents; premiums for the third or other shifts amounted to more than 5 cents but less than 10 cents.

Vacations with pay for plant and office workers were universal in both industries (information was not available in a few gas companies). Over half of the electric and gas utilities provided a 2-week paid vacation after a year's service for their plant (nonoffice) workers; practically all others provided vacations of 1 week. For office workers, a higher proportion of companies—about two-thirds in both industries—granted 2 weeks after 1 year's service.

Paid holidays were provided for both plant and office workers by all but a few electric and gas utility companies. The number of holidays with pay varied from 5 to 12 (except for 1 gas company which provided 3). Slightly more than two-thirds of the companies in both industries paid plant and office workers for either 6, 7, or 8 holidays not worked. New England tended to be more liberal in this respect than the other regions; a majority of the electric and gas companies located there granted 10 or more holidays with pay. At the other extreme, none of the Southeast companies in either industry provided more than 7 days, 5 being the most common.

Insurance or pension plans of at least one type were found in all but a few companies in both industries. Life insurance plans were the most prevalent, although the proportion of companies providing retirement pensions was high. In fact, slightly more than 70 percent of the electric companies and slightly less than this proportion of gas companies had retirement plans for both plant and office workers.

Formal provisions for granting paid sick leave for plant and office workers had been established in both industries by a great majority of the companies studied. The eligibility requirements and the amount of sick leave granted varied considerably among the establishments.

Only about 10 percent of the gas utilities and about 15 percent of the electric companies paid nonproduction bonuses to their plant and/or office workers. In practically all cases, these payments were in the form of a Christmas or year-end bonus.

Factors Affecting Earnings of Ceramic Engineers [1]

CERAMIC ENGINEERING is a small but significant branch of the engineering profession and is related to chemical engineering. The 2 to 3 thousand ceramic engineers in the United States are employed mostly in industries manufacturing refractory materials, whiteware, enameled metal products, glassware, and structural clay products.

Factors affecting their earnings, as revealed in a recent survey by the Bureau of Labor Statistics, follow a pattern similar in most respects to that observable in related professional occupations.[2] Information on these factors is of interest not only to members of the profession and to those who set salary rates for ceramic engineers, but also to persons concerned with counseling young people in the choice of a profession.

Earnings of professional workers, it is generally recognized, are influenced by a combination of factors, only some of which are susceptible of statistical measurement. Therefore, although the survey emphasizes the effects of length of professional experience, educational attainment, and the type of engineering work performed, many other factors are known to operate, such as individual personality or the "breaks" in employment opportunity.

The earnings data given in this report apply only to specific members of the Institute of Ceramic Engineers and are not intended to represent the earnings of all ceramic engineers. It has been found in connection with other surveys that a professional society membership in some cases tends to contain a greater percentage of persons who have attained higher income or other status in their fields than does the profession as a whole. Although it has not been established that this is true in ceramic engineering, data obtained through a survey of society members must be interpreted with caution. It is believed, however, that the factors which affect earnings do not differ as between members and nonmembers.

[1] Prepared by Cora E. Taylor of the Bureau's Occupational Outlook Branch. The report is based on a survey made by the Bureau of Labor Statistics at the request of the Institute of Ceramic Engineers. A complete report on the findings of the survey was published by the Institute in the August 1948 issue of The American Ceramic Society Bulletin. It is available in mimeographed form on request to the Bureau of Labor Statistics.

Anonymous questionnaires were mailed to 425 Institute members in August 1947; a total of 330 usable forms were returned. Information on personal characteristics, education, experience, location, employment status, and earnings was requested for the years 1939, 1943, 1946, and 1947—covering a period which witnessed great changes in the economic conditions of the country.

[2] See, for example, Factors Affecting Earnings in Chemistry and Chemical Engineering (Bureau of Labor Statistics Bul. No. 881, 1946); and The Engineering Profession in Transition (Engineers Joint Council, 33 W. Thirty-ninth St., New York 18, N. Y., 1947).

Experience

Length of experience is one of the most influential factors affecting earnings. As shown in table 1, salary increased with experience in each of the years for which earnings data were obtained. For men with a given length of experience, the salary range was wide, indicating that other factors were also important in determining salary. The average increase in base salary appeared to be about $15 monthly—or about $180 a year—for each year of experience in ceramic engineering up to about the twenty-fifth. It was notable that in general this average increment was found in the four widely different years for which information was obtained—1939, 1943, 1946, and 1947. After the twenty-fifth year, increases in average incomes occur, but the data are not clear-cut as to the pattern or the amount.

In terms of annual income (including such items as fees and bonuses as well as base monthly salary), the average increment with each additional year of experience was a little higher—about $200 a year.

TABLE 1.—*Median base monthly salary, in specified years, of members of Institute of Ceramic Engineers, by years of experience*

Years of experience	Median base monthly salary in—				Percent increase in median salary from—			
	1939	1943	1946	1947	1939 to 1947	1939 to 1943	1943 to 1946	1946 to 1947
All reporting engineers	$315	$384	$475	$505	60.3	21.9	23.7	6.3
Less than 5 years	169	227	280	(1)	(2)	34.3	23.3	(2)
5–9 years	246	303	335	390	58.5	23.2	10.6	16.4
10–14 years	317	385	414	442	39.4	21.5	7.5	6.8
15–19 years	424	418	502	509	20.0	−1.4	20.1	1.4
20–24 years	487	544	570	620	27.3	11.7	4.8	8.8
25 years and over	545	644	645	700	28.4	18.2	.2	8.5
Median years of experience: All reporting engineers	12	14	16	17	------	------	------	------

[1] Too few respondents to compute median; the salary range was from $240 to $370.
[2] 1947 data not available.

Occupational Status

That the levels of engineers' earnings are greatly influenced by the type of work performed is apparent from the following tabulation:

	Percent distribution	Median base monthly salary 1947	Median years of experience
All engineers reporting	100.0	$505	17
Administration-management	38.7	570	20
Sales	7.2	510	15
Teaching	5.7	504	20
Development	4.7	487	18
Production	6.4	450	12
Research	24.0	448	14
Plant control	5.4	400	13
All other	7.9	----	----

Highest salaries were paid in administrative jobs, in which nearly two-fifths of the reporting engineers were employed in 1947. Research, in which about a fourth were engaged, paid a median monthly salary $122 below that received in the top field. This is accounted for in part by the greater amount of experience of those in administrative work.

Educational Level

The effect of advanced training on earnings was difficult to determine from the survey, because the number of respondents was too small to permit comparison of earnings by educational levels and by detailed years of experience. This much is known: Ceramic engineers with doctors' degrees had a higher median base monthly salary than those with bachelors' degrees, although their average length of experience was 1 year less. There were other indications that those with advanced degrees were relatively better off than those in the bachelor group. In 1947, no respondent with a doctor's degree made less than $340 a month, and none with a master's degree made under $320 a month; but nearly 10 percent of those with bachelor's degrees earned less than $320 monthly. Below are shown median base monthly salaries in 1947 for broad experience groups of engineers with masters' and bachelors' degrees, and the median years of experience for each level of education.

	Median base monthly salary of those with—		
	Doctor's degree	Master's degree	Bachelor's degree
All engineers reporting experience	$528	$502	$500
Less than 15 years	(1)	453	389
15 years and over	(1)	650	620
Median years of experience: All reporting	16	15	17

[1] Too few cases to compute median.

Earnings, 1939 to 1947

Over the past 8 years, earnings of ceramic engineers have risen, as have earnings in most other occupations. These increases resulted from general economic factors—the rapid transition of an economy not fully recovered from a serious depression to a wartime economy, and a further rapid transition to a postwar period of unprecedented high levels of employment. Another factor which has clearly affected the earnings of individual engineers is the progression in occupational status that comes with additional years of experience.

A median base monthly salary for all respondents is shown for each survey year in table 1. The comparison of these medians from year to year should be interpreted with caution, since the median age of the group reporting is different for each year, as is shown in the last line of the table. Thus, part of the increase in median salary for the entire group of members is attributable to the rise in their average amount of experience, rather than to changing economic conditions.

For each experience group, salaries advanced from 1939 to 1947. Between 1939 and 1943, the range of increase in median base monthly salary of the various experience groups was from $57 to $99, or from 11.7 percent to 34.3 percent. (The group of engineers with 15 to 19 years of experience was an exception, owing to a slight drop in median salary between 1939 and 1943. This deviation is not considered significant, however, as the group regained its relative position in the following survey year.) From 1943 to 1946—including the transition from a wartime to a post-

ar period—the increases for the various groups anged from $1 to $53, or from less than 1 percent 23.3 percent (excluding the group with 15 to 9 years of experience); and from 1946 to 1947 excluding the same group), the medians increased y from $28 to $55 or from 6.8 percent to 16.4 ercent. Over the entire 8-year period, increases anged from $85 to $155, or from 20.0 percent to 8.5 percent.

The dollar amount of salary increase for the younger groups did not differ greatly from that for the oldest groups, but percentagewise, the increase was of course greater. In other words, economic conditions had the effect of maintaining the dollar amount of differentials between the younger and older engineers but of reducing the percentage differentials in the salary ladder of the profession. In 1939, engineers with 25 or more years of experience averaged 121.5 percent more than those with 5 to 9 years of experience; in 1946 they averaged only 92.5 percent more; and by 1947 the difference was narrowed still further to 79.5 percent. Except for the tendency just noted, salary progression with advancing experience in the profession has remained fairly constant.

From 1939 to 1946, the increase in median annual income (table 2) averaged $2,287, or 59 percent, for the whole group; but median years of experience also increased from 12 years to 16 years. In the grouping of engineers by length of experience, the increases from 1939 to 1946 ranged from 13 percent at the 20–24 years level to 71 percent for the group with less than 5 years of experience.

TABLE 2.—*Median annual income, in specified years, of members of Institute of Ceramic Engineers, by years of experience*

Years of experience	Median annual income in—			Percent increase in median income from—		
	1939	1943	1946	1939 to 1946	1939 to 1943	1943 to 1946
All reporting engineers	$3,858	$4,895	$6,145	59.3	26.9	25.5
Less than 5 years	2,128	2,900	3,640	71.1	36.3	25.5
5–9 years	3,114	3,850	4,733	52.0	23.6	22.9
10–14 years	3,700	4,767	5,300	43.2	28.8	11.2
15–19 years	5,350	5,233	6,563	22.7	−2.2	25.4
20–24 years	6,300	7,320	7,114	12.9	16.2	−2.8
25 years and over	6,900	8,250	9,729	41.0	19.6	17.9

Leather Manufacturing: Man-Hour Requirements, 1939–46

AVERAGE MAN-HOUR REQUIREMENTS for manufacturing a pound or a square foot of selected types of leather were approximately 1 percent lower in 1946 than in 1939, according to reports received by the Bureau of Labor Statistics from companies operating 40 tanneries and accounting for almost one-third of the industry's production of the types of leather studied. From 1939 to 1940, the Bureau's index of man-hour requirements per unit of leather increased 4 percent, the rise being due largely to a sizable decline in production which resulted in incomplete utilization of plant facilities. In 1941, man-hours expended per unit declined sharply from the 1940 high, chiefly because of a large industry expansion in production. During that period the greater volume of output stimulated improvements in technology and the adoption of mechanical equipment. Furthermore, the imminence of war led to some labor-saving modification in the product. Economies in labor time resulting from these improvements and product simplifications were reflected in the index throughout the entire period 1941 to 1945, when unit man-hours remained virtually constant at a point about 5 percent below the 1939 base. From 1945 to 1946, unit labor requirements rose approximately 3 percent because of severe shortages of materials and a lower volume of production (table 1).

Trends by Type of Labor

The trend in direct labor, which makes up about 85 percent of total factory labor, virtually coincided with the trend in the total throughout the period covered. Indirect (or overhead) labor, however, declined substantially from 1940 to 1941, reaching a point 10 percent below the 1939 level. It rose gradually after 1941, the level in 1946 being 3 percent above the 1939 base (chart 1). Most of the personnel in indirect-labor categories are required whether plant production is high or

[1] Prepared in the Bureau's Productivity and Technological Development Branch.

low; as a consequence, fluctuations in volume of output affected the level of indirect man-hours per unit more sharply than that of direct-labor man-hours.

TABLE 1.—*Indexes of direct, indirect, and total factory man-hours expended per unit in production of leather, 1939–46, all reported types combined* [1]

[1939=100]

Factory man-hours	1940	1941	1942	1943	1944	1945	1946
Total	104	95	96	95	95	96	99
Direct	104	96	96	95	94	96	99
Indirect (overhead)	104	90	95	97	98	98	103

[1] These indexes show the average relationship between man-hours expended and units of product for the selected types of leather covered. The trends are determined by the combined influence of a large number of factors, including changes in equipment, production methods, management policies, skill and efficiency of the work force, availability of materials, product characteristics, and product quality.

Man-hours per unit of product include the total factory man-hours, as generally classified by factory accountants, which are charged to the specified product. Direct man-hours consist of labor time expended in the following stages of processing: storage, beam house, tanning, splitting and shaving, coloring and fat liquoring, drying and tacking, finishing, and measuring and sorting. Indirect labor man-hours are comprised of functions such as general supervisory maintenance, shipping and receiving, materials handling, and plant timekeeping. General administration, office, research, and sales were excluded from all man-hour data. Direct- and indirect-labor man-hours, the sum of which constitutes total man-hours, are defined in a manner which conforms with the general accounting practices of reporting firms.

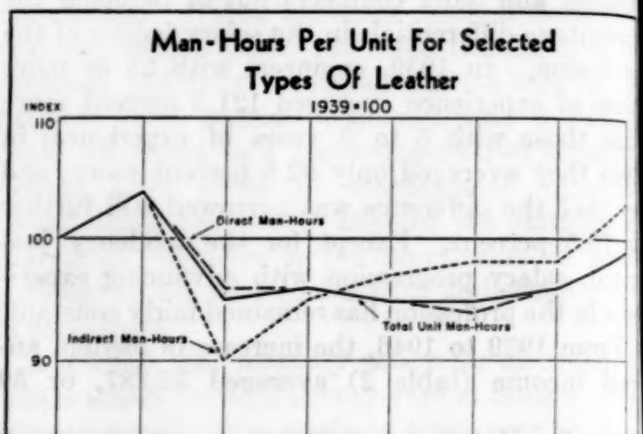
The types of leather selected for coverage included sole leather, side, vegetable tanned; upper leather, side, chrome tanned; upper leather, calf and kip, chrome tanned; upper leather, calf and kip, vegetable tanned; upper leather, goat and kid, chrome tanned; glove and garment leather, sheep, chrome tanned; lining leather, sheep, chrome tanned; shearlings.

Other Factors Affecting Man-Hour Trends

Small plants made greater reductions in man-hours per unit, on the average, than did large plants. In 1946, tanneries employing 100 or fewer wage earners produced leather with an expenditure of only three-fourths of the unit labor time required in 1939, while plants employing over 500 expended 3 percent more unit man-hours in 1946 than they did in 1939. The small plants were generally able to achieve reductions in man-hours per unit by introducing large-scale production methods as their output increased during the war years. The larger facilities in general had already effected these savings prior to 1939; consequently they had less opportunity to achieve man-hour savings.

Companies which had made improvements in machinery, equipment, or production methods reported man-hour trends significantly more favorable than the trends reported by establishments that made no such changes. By 1946, the unit labor requirements for the former group were 10 percent below the 1939 level, while those for the plants reporting no improvements were equal to the 1939 level. During the intervening years, unit man-hours for firms which introduced chang were consistently below the 1939 base. F firms reporting no changes, however, the man-ho averages rose rapidly during the prewar perio then declined, but remained considerably abo the level for the other group.

Despite the relative stability of the unit ma hour index for all reported types of leather com bined, there was a considerable amount of diver gence in trends both between individual types leather and between individual producers. A extremely complex combination of factors tende to improve or to lower productive efficiency These included age and condition of equipment work scheduling, technological and chemica



developments, standardization and simplification of product, and availability of trained labor and suitable materials. Some of these influenced all establishments in the industry, others affected primarily some one segment or a particular group of plants. The particular combination of such factors in an establishment determined its year-to-year trend. Rarely, if ever, was the same combination encountered in two or more individual establishments.

For the industry as a whole, influences which tended to improve efficiency and lower the level of unit man-hour requirements predominated throughout the period. The increase in volume of output during the war encouraged the acquisition of modern equipment, and longer uninterrupted production runs were made practicable. In addition, the leather industry experienced the widespread application of technological improve-

ents and chemical developments. The principal chnological advances were made in the mechanation of handling of materials and in leather nishing. Chemical developments made possible celeration of the tanning process, particularly vegetable tanning. Wartime product standdization and simplification also contributed economy of labor time. Government restrictons reduced the number of qualities, types, rades, and finishes to a bare minimum, and vast uantities of leather were produced with simpli- ed finishing operations for military use (chiefly shoes).

TABLE 2.—*Indexes of factory man-hours expended per unit in production of selected types of leather, 1939–46, by status of technological change*

[1939=100]

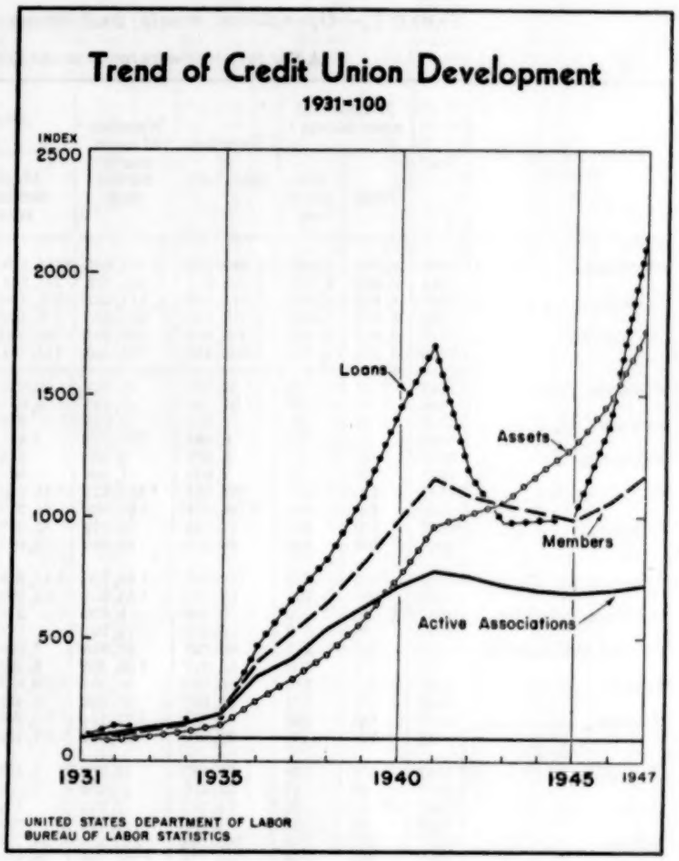
Companies reporting—	1940	1941	1942	1943	1944	1945	1946
Significant changes in machinery, equipment, or production methods	97	91	90	90	88	86	90
No significant technological changes	117	103	107	102	97	101	100

A number of conditions limited the extent of over-all labor-time savings. Short-term fluctuations in output tended to raise unit man-hours. Shortages of adequately trained labor and of materials created occasional severe problems. Lack of tanning materials frequently necessitated use of inferior synthetic substitutes and re-use of partially spent chemicals, with resulting inefficiency and a higher number of man-hours per unit of output.

Operations of Credit Unions in 1947

AN ALL-TIME PEAK in membership, assets, and total business was reached by the credit unions in 1947. At the end of the year nearly 3½ million persons were members of credit unions. Assets exceeded half a billion dollars. Loans to members during the year totaled $455,833,600.

Compared with 1946, the increases were 10.5 percent in members, 19.4 percent in assets, and 56.5 percent in business done (loans made). Assets increased nearly 96 million dollars in 1947. Reserves rose by more than 4¼ million dollars (15.7 percent), but since they increased more slowly than did loans, they formed only 11.4 percent of the loans outstanding at the end of the year (as compared with 14.7 percent in 1946).



Net earnings amounted to $14,138,716—an all-time high; the highest previous year was 1941, when earnings totaled $14,126,052. Dividends returned on share capital amounted to $9,964,201, also a record figure.

Associations under Federal charter, which during the war suffered equally with those operating under State laws, in 1947 showed somewhat greater relative increases than the latter. Membership in the Federal associations increased 10.7 percent and in the State associations 10.2 percent. For assets, the respective increases were 21.5 and 18.2 percent, and for loans made, 60.7 and 53.8 percent.

Statistics of Operation, 1946 and 1947 [1]

Six States had over 500 credit units each in 1947 (table 1), eight had over 100,000 member and in six the credit unions had made loans exceed ing 25 million dollars. Illinois was still the leadin State on all counts, with 803 associations, 387,9 members, and a total credit-union busines amounting to $51,787,000. It was the onl State with over 300,000 members and was fa ahead of its nearest rivals (Massachusetts and Ne York) as regards loans made.

[1] For the State-chartered associations the statistical data on which the present report is based were in most cases furnished to the Bureau of Labor Statistics by the State official—usually the Superintendent of Banks—charged with supervision of credit unions. For 1947, reports were received from every State in the Union. All of the information for the Federal credit unions was supplied by the Bureau of Federal Credit Unions (formerly in the Federal Deposit Insurance Corporation, but since July 1948 in the Federal Security Agency).

TABLE 1.—*Operations, assets, and earnings of credit unions in 1946 and 1947, by States*

[A few revisions were made in the 1946 figures, on the basis of later information]

State and type of charter	Year	Number of associations [1]		Number of members	Number of loans made during year	Amount of loans		Paid-in share capital	Reserves (guaranty fund, general reserve, etc.)	Total assets	Net earnings	Dividends on shares
		Total	Reporting			Made during year	Outstanding end of year					
All States	1947	9,168	8,942	3,339,859	2,170,685	$455,833,601	$279,923,268	$509,713,962	$31,917,643	$591,126,677	$14,138,716	$9,964,2
	1946	8,968	8,715	3,023,017	1,663,728	291,244,360	187,464,366	430,337,723	27,580,209	495,249,012	9,920,872	7,141,9
State	1947	5,155	5,097	1,893,944	1,217,321	271,324,497	188,551,071	317,303,919	24,973,759	380,751,106	8,760,467	6,079,2
	1946	5,003	4,954	1,717,616	941,135	176,432,535	130,663,429	270,619,683	22,138,340	322,082,553	6,623,866	4,491,0
Federal	1947	4,013	3,845	1,445,915	953,364	184,509,104	91,372,197	192,410,043	6,943,884	210,375,571	5,378,249	3,884,9
	1946	3,965	3,761	1,305,401	722,493	114,811,825	56,800,937	159,718,040	5,441,869	173,166,459	3,297,006	2,650,2
Alabama	1947	81	78	36,303	58,718	9,328,940	4,063,531	5,517,192	478,810	6,339,947	254,655	140,2
	1946	80	77	31,155	43,146	6,011,461	2,806,828	4,411,515	131,104	4,903,209	155,159	105,9
Arizona [2]	1947	24	24	4,667	3,066	919,200	513,916	612,910	23,233	685,375	25,068	15,0
	1946	22	22	3,661	[3] 1,742	[3] 451,959	249,351	419,254	18,558	461,877	11,107	7,9
Arkansas [2]	1947	27	27	3,861	2,920	454,810	245,164	424,136	21,093	462,538	14,689	9,5
	1946	26	25	2,642	1,988	302,278	161,700	336,930	18,059	369,260	8,445	6,2
California	1947	470	460	219,611	[3] 136,437	[3] 41,080,762	24,868,353	33,865,415	1,743,052	40,303,228	1,022,931	710,4
	1946	450	439	[3] 191,411	[3] 94,976	[3] 21,277,930	14,523,890	27,509,068	1,623,145	32,198,135	[3] 662,017	[3] 496,5
Colorado	1947	110	106	32,162	19,449	5,053,988	3,285,011	5,367,301	259,406	6,065,291	128,366	[3] 102,0
	1946	108	105	30,276	13,845	2,662,140	2,114,455	4,463,875	230,624	5,044,688	[3] 89,407	73,4
Connecticut	1947	255	250	100,825	[3] 64,726	[3] 12,818,841	6,263,297	16,191,662	526,438	17,729,793	342,095	256,4
	1946	238	235	88,911	[3] 45,964	[3] 8,290,371	3,952,384	12,691,011	419,544	13,655,416	256,351	175,7
Delaware [4]	1947	10	9	2,609	1,620	315,044	175,537	281,941	14,414	305,096	9,079	6,4
	1946	10	9	5,630	1,191	171,018	102,161	216,584	11,574	232,991	5,080	4,2
District of Columbia	1947	115	111	66,527	37,188	7,695,439	4,229,795	7,417,533	528,691	8,410,931	270,163	159,0
	1946	116	108	62,417	[3] 36,466	5,199,057	2,784,588	6,607,420	512,121	7,388,682	220,449	129,2
Florida	1947	173	170	45,339	36,584	8,682,345	4,911,313	7,548,875	304,897	8,370,812	229,537	213,6
	1946	174	164	39,007	26,328	5,458,971	3,237,060	6,608,819	250,891	7,182,915	155,246	136,3
Georgia	1947	137	133	41,185	[3] 31,154	[3] 5,956,501	4,276,563	2,230,645	560,240	7,273,612	[3] 198,403	[3] 133,9
	1946	129	126	35,660	[3] 24,032	[3] 4,152,776	2,957,620	1,907,768	344,855	6,200,263	[3] 134,772	[3] 97,1
Hawaii [5]	1947	102	98	36,537	13,661	4,838,881	2,585,365	10,939,510	320,645	12,127,254	249,780	195,3
	1946	98	97	35,667	10,250	2,858,167	1,454,437	10,043,821	279,018	11,082,943	186,193	156,0
Idaho	1947	31	31	[3] 4,989	2,541	571,880	348,072	532,842	15,987	567,190	15,278	10,8
	1946	33	32	4,395	1,714	356,387	194,480	454,030	12,875	477,112	8,076	5,9
Illinois	1947	803	798	387,943	[3] 322,526	51,787,004	28,435,015	66,469,087	3,599,735	71,490,881	1,798,869	1,296,0
	1946	786	784	354,774	[3] 233,738	36,634,792	20,048,907	55,913,391	3,113,888	59,917,192	1,175,760	988,7
Indiana	1947	307	304	[3] 101,611	[3] 61,808	[3] 13,165,666	8,160,338	17,384,389	745,738	18,872,760	[3] 373,468	[3] 255,1
	1946	301	294	[3] 97,862	[3] 53,525	[3] 7,944,054	5,517,037	14,351,434	520,015	15,519,997	[3] 219,966	[3] 165,6
Iowa	1947	195	189	40,343	28,330	5,075,594	3,391,980	7,008,687	309,282	8,172,753	142,667	116,8
	[3] 1946	195	190	39,802	18,459	2,447,519	1,929,470	5,580,513	277,184	6,336,131	66,507	51,0
Kansas	1947	123	120	29,921	18,552	4,475,958	2,973,836	4,561,123	159,541	4,982,118	167,311	90,9
	1946	114	113	[3] 26,437	16,769	2,816,037	1,779,831	3,605,350	143,937	3,926,380	[3] 62,237	47,8
Kentucky [1]	1947	107	107	[3] 26,239	[3] 19,992	[3] 3,335,156	3,048,397	4,465,960	290,235	5,405,835	[3] 128,969	[3] 87,9
	1946	105	100	[3] 24,969	[3] 16,493	[3] 2,203,319	1,972,472	3,974,093	482,132	4,468,198	[3] 66,837	[3] 45,2
Louisiana	[3] 1947	143	137	[3] 38,795	[3] 28,021	[3] 5,029,148	2,813,452	4,355,388	242,970	4,915,023	[3] 141,059	[3] 100,3
	1946	142	137	34,869	19,812	3,204,388	1,615,942	3,612,713	370,203	4,170,453	84,927	66,1
Maine	1947	38	38	12,016	6,170	1,060,546	600,770	1,207,466	65,530	1,469,245	27,957	23,0
	1946	37	36	10,360	4,175	654,281	381,945	994,950	82,024	1,179,687	17,427	17,2
Maryland	1947	67	62	30,327	[3] 19,243	[3] 3,233,603	1,622,192	2,821,960	269,578	3,403,409	100,402	65,5
	1946	66	58	26,939	[3] 18,417	[3] 2,350,203	1,120,798	2,441,697	230,771	2,925,156	59,203	49,8
Massachusetts	1947	543	539	291,750	[3] 135,553	39,765,126	27,481,348	53,536,801	5,547,381	59,760,654	1,358,883	1,019,0
	1946	542	536	272,898	[3] 124,426	30,874,856	21,734,501	48,578,487	4,614,863	53,958,477	1,230,450	928,5
Michigan	1947	262	250	141,595	94,437	23,307,880	15,582,515	26,523,275	1,115,408	31,319,937	787,951	515,1
	1946	247	241	120,830	63,897	14,225,143	10,081,348	21,921,864	1,239,219	24,905,150	672,926	372,5
Minnesota	1947	335	319	77,669	47,855	10,063,330	11,243,526	13,975,368	740,009	18,562,979	313,215	232,3
	1946	338	317	70,562	[3] 31,618	[3] 5,239,870	8,069,037	12,090,885	900,127	16,187,086	[3] 306,145	[3] 229,3
Mississippi	1947	28	25	7,341	6,817	914,054	352,757	707,861	72,793	848,029	47,371	33,3
	1946	26	26	6,400	7,645	1,308,466	318,828	656,251	65,543	766,908	33,427	23,6
Missouri [4]	1947	372	372	[3] 95,131	[3] 41,370	[3] 10,876,829	7,950,803	16,789,978	812,511	19,027,762	175,440	288,8
	1946	373	373	90,270	29,581	[3] 5,552,391	4,384,999	13,868,150	740,627	15,297,867	158,548	181,9

See footnotes at end of table.

TABLE 1.—*Operations, assets, and earnings of credit unions in 1946 and 1947, by State*—Continued

[A few revisions were made in the 1946 figures, on the basis of later information]

State and type of charter	Year	Number of associations [1]		Number of members	Number of loans made during year	Amount of loans		Paid-in share capital	Reserves (guaranty fund, general reserve, etc.)	Total assets	Net earnings	Dividends on shares
		Total	Reporting			Made during year	Outstanding end of year					
Montana	1947	44	41	[3] 8,153	[3] 3,965	[3] $998,256	$597,579	[3] $949,467	$26,289	$1,025,763	$30,789	$20,151
	1946	41	39	7,504	[3] 2,742	[3] 670,847	415,432	763,832	21,978	824,170	20,946	13,077
Nebraska	1947	83	83	21,812	14,534	2,924,903	1,647,073	2,875,990	177,780	3,537,863	81,532	49,132
	1946	88	86	20,009	9,468	1,706,821	1,033,802	2,449,138	134,967	3,036,993	46,746	[3] 26,194
Nevada [5]	1947	6	6	845	504	84,472	51,292	64,511	1,673	68,407	1,831	1,265
	1946	4	4	649	124	20,101	12,895	31,219	1,309	33,207	595	479
New Hampshire [5]	1947	13	13	6,426	[3] 4,111	[3] 1,249,300	1,003,049	677,188	124,530	1,957,813	53,826	11,650
	1946	13	13	5,705	[3] 3,164	[3] 791,102	740,034	581,161	103,955	1,606,342	39,864	9,688
New Jersey	1947	251	243	107,615	63,210	10,431,064	5,055,396	15,333,413	534,983	17,229,690	367,620	292,062
	1946	253	240	102,732	50,547	6,817,385	3,491,649	13,335,231	465,644	15,048,622	298,572	235,405
New Mexico	1947	41	41	[3] 2,635	[3] 1,250	[3] 227,307	131,141	174,976	7,731	193,731	[3] 5,267	[3] 3,859
	1946	41	40	2,298	592	[3] 128,185	70,755	131,619	5,699	139,693	2,798	2,107
New York	1947	731	703	280,895	162,711	39,236,577	22,197,509	39,146,047	3,499,649	44,293,848	1,110,719	772,710
	1946	742	708	263,760	[3] 138,830	[3] 25,643,199	16,065,988	34,854,458	3,229,914	39,570,348	856,892	454,645
North Carolina	1947	216	201	45,025	[3] 32,823	4,487,596	3,695,180	5,827,077	229,477	7,657,133	103,671	78,492
	[3] 1946	202	186	39,267	27,344	3,143,234	3,429,649	4,729,319	274,307	6,371,354	93,472	70,774
North Dakota	1947	90	89	12,804	4,143	2,441,863	1,812,913	4,190,873	74,230	4,326,210	63,759	28,929
	1946	98	91	11,420	3,419	1,395,406	1,116,775	2,996,741	50,463	3,110,472	32,719	19,115
Ohio	1947	583	571	231,586	151,407	31,736,188	17,503,925	32,300,524	1,402,583	35,041,472	889,866	577,632
	1946	583	565	207,461	112,553	19,265,370	10,908,262	26,620,636	1,132,367	28,509,831	492,848	368,422
Oklahoma	1947	75	73	[3] 21,123	[3] 14,355	[3] 3,390,788	2,264,801	1,538,535	126,454	3,562,938	[3] 160,257	[3] 102,292
	1946	76	70	[3] 17,034	[3] 9,562	[3] 2,114,248	1,410,286	1,140,384	96,275	2,672,710	[3] 56,308	[3] 37,831
Oregon	1947	70	66	15,845	10,314	2,299,971	1,440,619	2,281,279	106,605	2,465,287	62,756	43,698
	1946	70	66	13,167	5,928	1,194,378	779,021	1,813,737	97,796	1,978,800	34,855	29,086
Pennsylvania	1947	592	571	255,896	159,332	27,684,379	14,331,718	29,547,094	1,131,363	33,155,524	858,056	631,496
	1946	581	563	224,563	125,247	19,018,887	9,567,596	24,796,473	976,097	27,655,599	588,268	449,256
Rhode Island	1947	41	36	32,776	9,639	4,836,929	7,865,352	5,580,507	668,442	13,838,219	280,342	133,281
	1946	39	38	28,391	7,241	3,736,516	6,029,600	4,737,329	527,999	12,335,169	196,267	99,184
South Carolina	1947	32	27	6,984	6,037	934,195	478,874	728,342	34,459	833,574	22,892	14,484
	1946	32	27	6,353	4,362	564,564	287,220	605,133	34,433	662,442	11,857	10,016
South Dakota [5]	1947	34	32	5,210	2,619	388,009	193,939	607,138	23,878	650,558	15,251	11,383
	1946	34	33	4,960	2,087	260,776	127,725	547,234	21,498	584,656	10,222	11,427
Tennessee	1947	121	119	46,344	[3] 34,834	[3] 5,955,702	3,695,429	6,481,077	624,525	7,337,095	[3] 141,056	99,585
	1946	117	114	38,678	[3] 35,462	[3] 4,287,927	2,469,374	5,159,872	538,589	5,895,987	[3] 75,449	57,956
Texas	1947	333	329	99,404	84,700	17,493,268	9,382,084	16,202,789	910,245	18,032,309	434,908	340,208
	1946	333	320	82,078	[3] 55,289	[3] 9,112,250	5,437,702	13,066,956	750,354	14,179,972	262,783	212,708
Utah	1947	62	62	14,257	[3] 8,991	[3] 2,405,430	1,795,826	2,267,636	647,596	2,562,066	[3] 91,974	[3] 72,078
	1946	61	60	11,587	[3] 7,019	[3] 1,875,997	1,062,533	1,689,696	75,693	1,889,928	[3] 69,210	[3] 47,347
Vermont	1947	23	21	2,341	[3] 1,993	[3] 156,029	71,871	107,772	3,468	119,447	2,344	1,202
	1946	16	16	[3] 1,750	[3] 1,422	[3] 100,646	38,887	84,063	2,888	93,021	857	438
Virginia	1947	91	87	28,481	20,455	3,306,509	2,177,335	2,211,295	571,154	2,889,497	86,020	43,965
	1946	85	80	24,020	15,130	2,029,690	1,076,292	1,830,635	222,587	2,368,700	49,108	38,414
Washington	1947	164	163	41,809	[3] 30,518	[3] 6,426,322	3,844,670	5,766,589	196,490	6,374,080	203,527	129,520
	1946	170	167	36,750	[3] 19,768	[3] 3,413,916	2,067,846	4,775,754	358,479	5,228,626	119,791	84,681
West Virginia [5]	1947	61	58	16,509	13,734	2,016,719	1,049,191	1,596,520	127,396	1,963,690	63,664	38,984
	1946	63	56	15,918	11,405	1,387,299	770,275	1,369,679	126,800	1,659,293	44,527	28,830
Wisconsin	1947	536	533	156,857	94,426	14,503,394	7,981,453	22,121,265	1,885,647	24,700,950	671,548	380,822
	1946	525	521	146,538	73,881	9,604,297	5,414,426	18,615,959	1,687,138	20,661,585	460,962	264,950
Wyoming [5]	1947	17	17	2,931	1,342	411,906	232,205	398,753	13,379	437,061	11,635	7,601
	1946	17	15	2,621	945	253,485	146,273	351,592	10,079	375,319	8,294	6,910

[1] Most of the difference between the total number of associations and the number reporting is accounted for by credit unions chartered but not yet in operation by the end of the year and those in liquidation which had not yet relinquished their charters.

[3] Data are for years ending June 30.
[3] Partly estimated.
[4] Data are for years ending September 30.
[5] Federal associations only; no State-chartered credit unions in this State.

Trend of Development, 1925–47

Until the beginning of World War II, an unbroken rise in credit-union development had occurred, as indicated in table 2. With the higher wages, restrictions on credit, and other controls of the war period, this trend was halted and credit-union membership and business began a decline that was checked only at the end of the war. Assets, however, continued to increase steadily. By the end of 1947, although there still were fewer credit cooperatives than in 1942, membership and business had reached and passed the prewar peak.

TABLE 2.—*Relative development of State and Federal credit unions, 1925–47*

[Some revisions in figures previously published, on basis of later information]

Year	Total number of credit unions			Active, reporting credit unions			Members			Amount of loans made			Assets		
	Total	State	Federal	Total	State	Federal	Total	State	Federal	Total	State	Federal	Total	State	Federal
1925	419	419	------	176	176	------	108,000	108,000	------	$20,100,000	$20,100,000	------	(1)	(1)	------
1929	974	974	------	838	838	------	264,908	264,908	------	54,048,000	54,048,000	------	(1)	(1)	------
1931	1,500	1,500	------	1,244	1,244	------	286,143	286,143	------	21,214,500	21,214,500	------	$33,645,343	$33,645,343	------
1932	1,612	1,612	------	1,472	1,472	------	301,119	301,119	------	32,065,000	32,065,000	------	31,416,072	31,416,072	------
1933	2,016	2,016	------	1,772	1,772	------	359,646	359,646	------	28,217,500	28,217,500	------	35,496,668	35,496,668	------
1934	2,450	2,450	------	2,028	2,028	------	427,097	427,097	------	36,200,000	36,200,000	------	40,212,112	40,212,112	------
1935	2,600	2,600	------	2,589	2,122	467	597,609	523,132	74,477	39,172,308	36,850,000	$2,322,308	49,505,970	47,964,068	$1,541,9
1936	5,352	3,490	1,862	4,408	2,734	1,674	1,170,445	854,475	315,970	100,199,695	84,541,635	15,658,060	83,070,952	73,659,146	9,411,8
1937	6,292	3,792	2,500	5,231	3,128	2,103	1,503,826	1,055,736	448,090	141,399,790	110,625,321	30,774,469	115,399,287	97,087,995	18,311,2
1938	7,314	4,299	3,015	6,707	3,977	2,730	1,863,353	1,236,826	626,527	175,952,433	129,058,548	46,893,885	147,156,416	117,672,392	29,484,0
1939	8,326	4,782	3,544	7,841	4,677	3,164	2,305,364	1,459,377	845,987	230,429,517	159,403,457	71,026,060	192,723,812	145,226,718	47,497,0
1940	9,512	5,302	4,210	8,893	5,178	3,715	2,815,653	1,695,421	1,120,232	304,606,208	199,619,417	104,986,791	252,293,141	180,198,260	72,094,8
1941	10,457	5,664	4,793	9,658	5,514	4,144	3,321,312	1,924,616	1,396,696	359,711,005	225,379,046	134,331,959	322,214,816	216,557,977	105,656,8
1942	10,591	5,611	4,980	9,474	5,404	4,070	3,126,461	1,778,942	1,347,519	247,636,185	156,099,218	91,536,967	340,622,459	221,389,566	119,232,8
1943	10,372	5,284	5,088	8,978	5,119	3,859	3,015,487	1,713,124	1,302,363	208,569,688	131,304,306	77,265,382	355,262,808	228,314,723	126,948,0
1944	9,099	5,051	4,048	8,702	4,907	3,795	2,925,591	1,621,790	1,303,801	209,475,436	131,141,539	78,333,897	397,929,814	253,663,658	144,266,1
1945	8,890	4,931	3,959	8,629	4,872	3,757	2,841,154	1,624,529	1,216,625	210,904,783	132,635,939	78,268,844	432,583,911	279,480,791	153,103,1
1946	8,968	5,003	3,965	8,715	4,954	3,761	3,023,017	1,717,616	1,305,401	291,244,360	176,432,535	114,811,825	495,249,012	322,082,553	173,166,4
1947	9,168	5,155	4,013	8,942	5,097	3,845	3,339,859	1,893,944	1,445,915	455,833,601	271,324,497	184,509,104	591,126,677	380,751,106	210,375,5

[1] No data.

Union Labor and Nonfarm Cooperatives[1]

SOME OF THE OLDEST NONFARM COOPERATIVES in the United States were started with the assistance or support of labor organizations, but a larger proportion of the new than of the established cooperatives were thus formed. A study made by the Bureau of Labor Statistics, in an endeavor to learn to what extent organized labor is participating in cooperatives, indicated that, on the whole, comparatively few associations had the assistance of unions during the promotion period. In many instances, however, although unions as such took no part, their members were leaders in the project.

Most of the interest in cooperatives manifested during the past year by organized labor has been occasioned by the sharply increasing cost of living (particularly of food). Numerous new cooperatives have resulted, and some older associations report that unionists have joined or are patronizing the cooperative in varying numbers. Other reports indicate, however, that in many cases the interest died before anything concrete resulted.

The assistance received from the unions has taken various forms. These include promoting cooperatives in talks at union meetings, holding joint labor-cooperative meetings, endorsing cooperatives (or individual associations) in union resolutions, encouraging union members to join and patronize cooperatives, carrying articles regularly or occasionally in the union papers, helping to organize new associations (through volunteer or hired workers), and even lending or investing union funds in new or established cooperatives.

Many labor organizations were mentioned in the reports from the cooperatives as having provided one or more of the above types of help. Of these unions, slightly over 50 percent were AFL, about 30 percent were CIO, and about 20 percent were independent. The organizations whose members or locals were most frequently mentioned were (in descending order of frequency) the following:

International Union of United Automobile, Aircraft & Agricultural Implement Workers of America (CIO)

United Steelworkers of America (CIO)

United Brotherhood of Carpenters and Joiners of America (AFL)

International Brotherhood of Electrical Workers of America (AFL)

International Association of Machinists (independent)

International Union of Mine, Mill & Smelter Workers (CIO)

[1] By Florence E. Parker of the Bureau's Office of Labor Economics.

American Federation of State, County & Mu-
ipal Employees (AFL)
Textile Workers Union of America (CIO)
Amalgamated Clothing Workers of America
IO)

Many cooperatives are in localities where there
no labor unions. That would account in part
the fact that, in 21.7 percent of the associations
porting on membership composition, there were
members of labor organizations. In 27.9 per-
t of the associations, unionists formed a tenth
less of the membership. At the other extreme
re the associations—31.0 percent of the total—
f or more of the members of which belonged to
ions. Generally, in associations with any
able proportion of union members, the compo-
ion of the board of directors reflected roughly
e same proportion.

Characteristics of Reporting Cooperatives

Some 600 cooperatives of various types, known
be urban associations or rural associations in
hich farmers were a minority, were circularized
obtain information for the Bureau's study.
Usable reports were received from 347 associations
(286 distributive and 61 service).

The reporting associations, which included all
the largest nonfarm cooperatives in the United
States, had nearly 169,000 members, assets exceed-
ing 21 million dollars, and a combined business for
1947 amounting to nearly 59 million dollars.

They ranged in size—in terms of membership—
rom about 25 to nearly 8,300. Two-thirds had
ewer than 500 members, and about a fourth had
etween 500 and 1,500. Sixteen associations (5
ercent) had 2,500 or more, and of these, 2 had
,000 or more. In volume of business, they
anged from less than $10,000 a year to nearly
6,000,000. Almost 31 percent had a business of
ss than $50,000, nearly 22 percent between
50,000 and $100,000, and about 30 percent
etween $100,000 and $250,000. Nine associa-
ions (3 percent) had a volume of a million dollars
r more; this group included 6 operating stores, 2
perating creameries, and 1 operating a chain of
cafeterias and 6 food stores.

The reporting associations included enterprises
f all degrees of success, ranging from those con-
picuously successful to a few which had en-
countered such difficulties that their members voted to liquidate the enterprises in 1948.

Union Assistance in Organizing

Only a small proportion of these cooperatives had been started with the help of unions. The proportions were largest among the petroleum associations (3 of 13), the "other distributive" (2 of 9), the medical-care (2 of 4), and the burial associations (2 of 6). Of the 254 stores and buying clubs, only 37 had the support of labor organizations in getting started. None of the associations providing rooms and/or meals, and none of the housing, cold-storage, or "other service" associations had such help. Thus, in only 46 of the 347 associations of all types had unions been interested at the start; a large proportion of these were the younger associations, formed within the past few years.

In the case of one new association, Negaunee (Mich.) Cooperative Services, the idea of forming the cooperative undoubtedly was born when the iron miners who constitute the main body of its members received financial assistance, during their strike in the spring of 1947, from a cooperative in a neighboring town and from the regional cooperative wholesale. Within a month after the strike was settled, representatives of five CIO locals started a campaign which culminated in the opening of a cooperative store 9 months later. At the time of the association's report to the Bureau, union interest was being maintained by reports on the store's progress, which were a regular feature at local union meetings.

Three other newly organized associations—two in Michigan and one in Minnesota—had free publicity, assistance in organizing, and financial help from unions, especially from the automobile workers. In all of them, CIO and AFL locals united in promoting the cooperative. The Michigan associations opened outlets of the warehouse type in Detroit and Pontiac, respectively, selling the goods directly from the cases in which they were shipped. In these cooperatives, unionists form 70 and 75 percent of the membership.

Another outstanding example of joint labor-cooperative effort is the Peninsula Cooperative Association in Hampton, Va. In a drive begun by an independent union, Peninsula Shipbuilders

Association, share subscriptions to the cooperative were collected (with the consent of the employing company) by means of a voluntary salary check-off. Within 6 months (in January 1948) a complete food store, stocked largely with "co-op label" goods, was opened. Its first 3 days' sales totaled nearly $19,000; its sales for a month amounted to $64,700. About 90 percent of the 3,200 members belong to the labor organization which sponsored the project. The president and business manager of the union were serving as president and treasurer, respectively, of the cooperative.

In the formation of a Negro association, Cooperative Commonwealth, Inc., in Gary, Ind., the steel workers' locals (CIO), to which a large proportion of the members belonged, helped with publicity and some funds. This association profited by the mistakes of a previous cooperative (which went out of business in 1941), and its formation was preceded by several years of intensive educational and promotional work among the prospective members. Funds were raised, little by little over a long period, through collectors who made periodic calls upon subscribers. Much of the construction on the building for the combination grocery-drugstore-lunchroom enterprise which was opened at the end of 1946 was done by the members.

The Crane (Tex.) Cooperative Association, organized in 1947, received wide publicity from eight local unions, which also gave time for cooperative speakers at their meetings. The president of the plumbers' union became one of the cooperative's directors. At the time of its report, however, "only a small percentage of union labor had actually signed up" for membership.

Some of the oldest associations also were started by unions or their members. These include two funeral associations, in Christopher and Gillespie, Ill., the capital for which was provided in the early 1920's by local unions of the United Mine Workers. The largest consumers' cooperative creamery in the United States, Franklin Cooperative Creamery Association, Minneapolis, was started by striking milk-wagon drivers, with the support of the unions.

One of the urban petroleum associations, Cooperative Services, St. Paul, Minn., started operations, with the endorsement of the Central Labor Union of the city, in a station leased from the Labor Temple Association. Its organizers were all union men. During its 15-year existence it has had the support of the local labor unions generally. The association, which operates four gasoline stations and a repair garage in the Twin Cities, is currently receiving publicity and support from 15 different locals, some of which invested funds in the cooperative.

Labor Interest and Support

Improved Support. Among the store associations, only a small number (82 in all) reported any increase in support from unions or their members since the formation of the cooperative. Of these one noted that the increase was "very slight," and another stated that the interest expressed itself mostly in "talk" and not in patronage of the store.

In Massachusetts, "50 percent of the union members in one bakery" joined the greater Boston Cooperative Society; other unions, the members of which also have joined the cooperative in varying proportions, are those of the teachers and of State, county, and municipal workers (both AFL). At the end of 1947, however, unionists constituted only about 18 percent of its 575 members. One Pennsylvania cooperative was witnessing "the beginning of a rather spasmodic support" by individual unionists, mostly members of the longshoremen's union (AFL).

The United Cooperative Society, Maynard, Mass., which started over 40 years ago, before the local woolen mill was unionized, reported that support from unionists (though not from unions themselves) was increasing. About 50 percent of its 2,567 members belonged to the union (CIO) at the end of 1947. A cooperative in Michigan, the membership of which contains large groups of factory workers, office employees, and teachers, reported an access of interest by both CIO and AFL locals, but "no one union has put any concerted effort behind cooperatives." Sixty percent of its members are unionists.

The Cloquet (Minn.) Cooperative Society, one of the largest in the United States, was started in 1910, long before labor organizations appeared in the community. Its employees were the first in town—and for some years, the only store employees—to be unionized. Assistance to striking sawmill and paper-mill workers in 1920

and 1922 won continued union gratitude and good will. Members of these unions were conducting a stock-selling campaign and educational drive for the cooperative among factory workers, at the time of the association's report to the Bureau. This association lost its store and goods in a forest fire in 1918 which destroyed the whole town. Since that year, however, it has never sustained an operating loss. It has returned to its members in refunds on purchases the sum of $1,006,675, in addition to $100,808 in interest on their share capital. It is outstanding in the variety of goods and services provided. At the end of 1947, about 30 percent of its members were unionists.

The Janesville (Wis.) Consumers Cooperative Association, started just before World War II by CIO and AFL union members who combined forces for the purpose, had lately noticed more pronounced labor interest. The AFL Central Labor Union (with 23 affiliated unions) and the CIO Automobile Workers had each appointed a standing committee on cooperatives, and the latter union had become a fraternal member of the association. Organized workers formed 60 percent of this association's membership in 1947.

In Illinois, an association which had had no support from unions as such found that "union members join readily" when approached; members of organized labor formed 50 percent of the cooperative membership in 1947. A California association, started in 1936, states: "Now, after 12 years, we do have union members but no active support or sponsorship; however, labor support is growing. The local newspaper of the AFL Central Labor Union gives us bimonthly articles."

An iron miners' cooperative in Minnesota, which began operations in 1926, reported that recently members of the barbers' and steel workers' unions (both CIO) and railroad workers (AFL) had become interested. Another association in this State reported that the Trades and Labor Assembly was promoting cooperatives through a series of labor-cooperative conferences. A third Minnesota association, formed just before the war by members of the longshoremen's union (AFL), stated that several union locals, both AFL and CIO, recently formed cooperative committees. Sixty percent of the cooperative's membership belong to labor organizations.

In a Pacific Coast association started by AFL union shipyard workers, members of unions still constituted 90 percent of the membership. After 8 years of operation its membership had reached only 250, but new members have recently been coming in from the teamsters' and teachers' unions (AFL).

The Racine (Wis.) Consumers Cooperative Association, also started by unionists, began in 1933 with a single gasoline service station. Members of labor organizations form 75 percent of its 2,700 members. The greatest support has come from CIO automobile workers (automobile manufacture is the largest single industry in the city), but AFL unionists are now reported to be participating actively also. The association has 2 food stores, 4 gasoline stations, a coal yard, and an insurance agency.

A Pennsylvania association reported that one local union ran articles on cooperatives in its paper for a whole year; many union leaders were reported to be members of this cooperative. In an Ohio city, an AFL union had been issuing "certificate dollars" to be spent at the cooperative store. Investment of union funds in shares of the cooperative or in loans to the association was reported from Indiana, Michigan, Minnesota, and New York; and an association in New York State, the members of which are from 28 local unions, had one local join the cooperative as a member.

Cooperative Services, Indianapolis—a coal cooperative in the starting of which unions had a hand—reported increased patronage from unions buying coal to heat union halls, and considerable publicity and endorsement at union meetings by both CIO and AFL locals. A milk-distributing cooperative in Michigan, although not started by unionists, has since been aided by a small amount of union funds, and the CIO locals have encouraged their members to join; in 1947, 80 percent of the members were unionists.

One of the recreation cooperatives—a symphony orchestra—reports that "union leaders have become patron members and have supported and participated in concerts." Another association, which operates a meeting hall equipped with snack bar, and promotes recreational events, was started by members of the unions of dining-car employees and marine cooks and stewards (both CIO). The Pullman-car porters and their ladies' auxiliaries (AFL) had become interested also.

No Improvement in Support. Other cooperatives reported less encouraging situations. The manager of a new association in the Midwest stated that unions had not cooperated as they promised while the store was being started; the local union of electrical workers (AFL) "was the only one that really helped." An eastern seaboard cooperative reported "obstruction" by the AFL local unions. An Illinois association had held meetings with certain AFL unions, but had "no real support."

In one city in New York, "membership in the cooperative has been urged by labor leaders, but only a few [union members] have joined." A Pennsylvania cooperative reported only "lukewarm" support, and one in Washington State noted "some interest but no very active support." In a Connecticut town, a local CIO union "started to boost it [the cooperative] for a while but it soon died out." A Massachusetts cooperative noted that union members had "expressed interest, but few have joined;" unionists formed only 10 percent of the total membership at the end of 1947. A similar situation existed in an Ohio city, where the cooperative had been the object of interest by the AFL and CIO central labor organizations, but had only "negligible" support in terms of purchases at the store. In a Pennsylvania association the only evidence of union interest occurred when a "small group" of CIO textile workers joined; only 5 percent of its members in 1947 were unionists.

Unionists in Membership and in Directorship

Cooperatives do not ordinarily set out deliberately to accord labor organizations or their members representation on the board of directors. The usual criteria for nomination are membership in the cooperative and ability to perform the duties of the office. The number of unionists on a cooperative board is usually, therefore, the result of chance (or composition of the membership) rather than of design.

It appears, nevertheless, that on the whole, union representation on the board of directors of the cooperatives reporting in this study corresponds rather closely with the proportion of unionists in the membership. Members of labor unions constituted 50 percent or more of the cooperative membership in 31.0 percent of the associations reporting, but only 10 percent or less in 49.6 percent of them. In 51.2 percent of the associations which had unionists on the board of directors, half or more of the cooperative's members belonged to labor unions; in 23.0 percent, unionists constituted 10 percent or less of the cooperative membership. On the other hand, among the associations that had no directors belonging to labor unions, unionists form 10 percent or less of the membership in 85.2 percent of the associations (in this group, 53.3 percent had no union members at all).

Background of British Labor Movement [1]

TRADE-UNIONS IN GREAT BRITAIN at the present time must play a double role. "As supporters of a government which they helped to make, during a period of very great difficulty," Margaret Cole points out, "they have a part to play in the determination of national economic policy." While usually supporting the government, they have had also to bear in mind their other function—guardian of the standards of their members. As a result they are sometimes slow, and always cautious, as in the development of "wage and price" policy.

Trade-unionism in England, Mrs. Cole states, has actually had a dual history. "The first movement was revolutionary in the ordinarily accepted sense of the word. It was a reaction of the starving and downtrodden to the horrors of the second generation of the Industrial Revolution. * * * it thrived on secret ritual, torchlight processions, and mass enrollments which were political and even religious in their inspiration." This movement was thoroughly defeated—first at the collapse of Robert Owen's utopian Grand National Union and finally at the discrediting the Chartists suffered after the Kennington Common affair. The second labor movement literally was forced to start from "tiny coral-insect beginnings"; and "it is at least possible that recollections, handed down from father to son, of the dangers of 'revolutionism' may in part account for the complete failure * * * of Communist parties or Moscow directives to

[1] British Trade-Unions and the Labor Government, by Margaret Cole, honorary secretary of the Fabian Society, in Industrial and Labor Relations Review, July 1948 (pp. 573-579).

gain any control in either the trade-unions or in the Labor Party."

The labor movement, in its second try in England, was distinctly nonpolitical. "Our trade societies are *not* constituted on a political basis," the London Trades Council of 1861 told an inquirer. "Even 40 years later, when the first storms of world depression had swept the country, when Socialism was being preached again and it was becoming increasingly clear that the Liberal Party's zeal for social reform had spent itself—even then it was with the utmost difficulty," Mrs. Cole explains, that the founder of the Independent Labor Party "induced the principal trade-unions to join in founding the federation called the Labor Representation Committee—which became the Labor Party."

Finally in 1918, the constitution of the federation was revised to transform it into a real party. However, writes Mrs. Cole, even then the trade-union affiliates to the party did little more than act as a brake "against the premature adoption of proposals to which the mass of the movement had not yet been converted."

The lack of trade-union political action in the history of the present British labor movement explains the slow development of "policy." Trade-unions, through their congress, Mrs. Cole declares, are not the dictators and masters of the Government. Their influence derives only from the fact that "the majority of members of the Labor Party are trade-unionists, and the majority of trade-unionists members of the Labor Party."

Labor Requirements for New Construction, 1948

LABOR REQUIREMENTS for new construction projects under way (both private and public) during the third quarter of 1948 averaged 2½ million workers per month—the highest in 6 years. In response to a 60-percent increase in construction activity, as measured by the dollar volume of new work put in place, over 800,000 additional jobs were provided for construction workers between the first and third quarters of this year. Between the second and third quarters, seasonal increases occurred in labor needs for all types of construction except publicly financed housing.

Construction at the site of privately financed projects required more workers in the third quarter of 1948 (1,700,000) than at any time during the 10 years for which the Bureau has monthly data—1939 to date. Site labor needs for new nonfarm housing (787,000) and for privately financed public utilities (355,000) were also at the highest level in this 10-year period.

Site jobs on privately financed nonresidential building were provided for a monthly average of 417,000 workers during July, August, and September. This represents an increase of about 15 percent over the second quarter and reflects continued gains in the construction of community shopping and service centers (stores, restaurants, garages, etc.) to accommodate expanding residential areas.

Labor requirements for publicly financed nonresidential building have been rising steadily since the first quarter of 1947, largely because of expanded building programs for educational institutions. In the third quarter of 1948, 88 percent more site workers were needed for public nonresidential construction than in the same period of 1947.

Jobs provided by public road and street construction increased threefold between the first and third quarters of 1948, and accounted for two out of every five workers engaged on publicly financed construction in July, August, and September. Total labor requirements at the site of public construction exceeded half a million workers in the third quarter of 1948, a gain of 100,000 over the second quarter.

Labor requirements for new construction [1]

[Estimated total number of workers involved in current construction activity]

Type of construction	Average monthly number of workers (in thousands)											
	1948			1947				1946				1947	1948
	3d quarter [2]	2d quarter [2]	1st quarter [2]	4th quarter	3d quarter	2d quarter	1st quarter	4th quarter	3d quarter	2d quarter	1st quarter		
Total new construction (off-site and on-site) [3]	2,528	2,156	1,709	2,135	2,102	1,708	1,515	1,928	2,081	1,628	1,114	1,865	1,68
Off-site	300	261	217	266	246	204	194	242	254	204	144	228	21
On-site	2,228	1,895	1,492	1,869	1,856	1,504	1,321	1,686	1,827	1,424	970	1,637	1,47
Private construction	1,701	1,469	1,190	1,494	1,453	1,165	1,053	1,304	1,461	1,194	815	1,291	1,19
Residential building (nonfarm)	787	690	553	742	627	476	416	510	550	407	248	565	42
Nonresidential building (nonfarm) [4]	417	365	347	373	360	349	395	495	538	500	379	369	47
Farm construction	142	96	33	60	135	82	28	49	114	65	22	76	6
Public utilities	355	318	257	319	331	258	214	250	259	222	166	281	22
Public construction	527	426	302	375	403	339	268	382	366	230	155	346	26
Residential building	8	8	13	20	21	25	57	107	78	31	9	31	9
Nonresidential building [5]	145	125	112	96	77	65	47	50	55	48	55	71	8
Conservation and development	60	49	38	47	47	37	34	39	33	27	23	41	3
Highways	214	149	70	133	171	131	68	121	129	76	35	126	9
All other public [6]	100	95	69	79	87	81	62	65	71	48	33	77	9

[1] Previously published as employment estimates, which included data on minor building repairs.

These estimates are designed to measure the number of workers required to put in place the dollar volume of new construction under way during the given period of time. They cover the workers engaged at the site of new construction and also employees in yards, shops, and offices whose time is chargeable to new construction operations. Consequently the estimates include not only construction employees of establishments primarily engaged in new construction, but also self-employed persons, working proprietors, and employees of nonconstruction establishments who are engaged in new construction work. They do not cover persons engaged in repairs and maintenance.

The non-Federal construction estimates are derived by converting, into man-months of work, dollars spent during each month of the quarter on construction projects under way. The conversion is made by using a factor representing the value of work put in place per man per hour based on data from the 1939 Census of Construction and from periodic studies of a large number of individual projects of various types by the Bureau of Labor Statistics. The factor is adjusted for each quarter in accordance with changes in prices of building materials, average hourly earnings of construction workers, and average hours worked per week. For Federal construction, estimates are made directly from reports on employment collected from contractors and then checked against estimates based on Federal expenditures.

For estimates of the total number of workers employed by firms engaged in new construction, additions, alterations, repairs, and maintenance work, see table A–2, p. 423.

[2] Preliminary.
[3] Revised.
[4] Includes major additions and alterations.
[5] Includes nonresidential building by privately owned public utilities.
[6] Includes workers employed on facilities used in atomic energy projects.
[7] Includes airports, water supply and sewage disposal systems, electrification projects, and miscellaneous.

Labor-Management Disputes in September 1948

THE NUMBER OF WORKERS IDLE in four large strikes approximated 90,000 in September 1948. These disputes involved about 28,000 West Coast maritime workers, 25,000 production workers at 8 plants of the Briggs Co. in Detroit, as well as 22,000 oil workers in California and some 15,000 truckers in New York and Northern New Jersey. The strike at the Boeing Airplane Co. in Seattle, Wash., which began April 22 was called off by the union on September 10.

A strike of approximately 25,000 installation workers, members of the CIO Assn. of Communication Equipment Workers and employees of the Western Electric Co., was averted by a last minute agreement on wage increases. Negotiations which had been in progress for over 4 months were highlighted by a series of short, sporadic work stoppages in various parts of the country. The settlement, which must be ratified by union members, will give workers an average hourly increase of 11 cents, or $4.40 a week. Still unsettled in the telephone industry was the dispute of some 25,000 long distance telephone workers, whose union, the CIO American Union of Telephone Workers, resumed wage talks with the American Telephone and Telegraph Co. in mid-September.

West Coast Maritime Strike

Approximately 28,000 West Coast dock workers and seagoing personnel, members of five unions, became idle in West Coast ports on September 9 upon the termination of the 80-day antistrike injunction issued under the Labor Management Relations Act of 1947. Increased wages and the union hiring hall were the principal issues in dispute.

Delegates of the International Longshoremen's and Warehousemen's Union on August 20 had voted unanimously to reject the shipowners' last offer of a 5-cent hourly wage increase. However,

egotiations continued and the employers reortedly offered wage increases of 10 cents an our with the hiring hall question to be held in tatus quo to await a test decision by the courts.

As the strike began, further negotiations were uspended when the Waterfront Employers Assoiation and Pacific American Shipowners Assocition withdrew all previous offers and demanded hat maritime leaders sign non-Communist affiavits, required under the Labor Management elations Act of 1947. In addition to members f the International Longshoremen's Union, other nions in the dispute include the Marine Cooks nd Stewards (CIO), the Marine Engineers' eneficial Association (CIO), the Marine Firemen, ilers, Watertenders and Wipers (Ind.) and a adio officers' union.

At the end of the month, no negotiations were n progress between the longshoremen's union nd the associations, nor had any agreements een reached with the other unions.

Guard Strike at Detroit Briggs Plants

A shut-down of 8 plants of the Briggs Manufacturing Co. occurred on September 8 when 170 plant guards, members of the United Plant Guard Workers of America (Ind.), walked out. They demanded, among other things, 15 minutes preparatory time (at overtime rates) in which to get ready for work. All hourly paid employees had been granted 5 minutes of preparatory time at straight-time rates. The plants closed when the 25,000 CIO United Auto Workers refused to cross the picket lines, and an equal number of workers at other auto plants were reported idle as a result. UAW officials charged that the principal cause of the dispute was that provision of the Labor Management Relations Act of 1947 which prohibits guards' membership in a production employees' union. The guards involved in the dispute were formerly UAW members, but were forced to disaffiliate.

At a conference with representatives of the Michigan State Mediation Board on September 13, the union offered to settle the strike on the basis of a wage increase of 10 cents an hour, but the company reportedly refused the offer. A settlement was reached September 23 when a 2-year contract was signed retaining the 5-minute preparatory time arrangement but giving the union a maintenance-of-membership clause.

Oil Workers Strike in California

About 16,000 employees of 9 major oil companies in California stopped work on September 4 as last-minute negotiations between the companies and the 16 locals of the Oil Workers International Union (CIO) failed to bring about agreement on wages. The union asked originally for hourly increases ranging from 30 to 39½ cents but lowered the demand to 21 cents by September 3. The companies' offer was 12½ cents which they claimed would raise wages 83 percent above the 1941 figure.

The number of idle workers increased to nearly 22,000 on September 8, when members of the Independent Union of Petroleum Workers, employees of the Standard Oil Co. of California, failed to reach an agreement and joined in the strike.

A temporary embargo was placed on the shipment of commercial oil from the West Coast ports by the U. S. Department of Commerce. Earlier, Governor Earl Warren had ordered the California Public Utilities Commission to survey the oil supply with a view to insuring the transportation of farm products. Efforts of conciliators to settle the strike were continuing at the end of the month.

New York Trucking Strike

Nearly 10,000 truck drivers and helpers stopped work in New York City on September 1, upon expiration of the contract between trucking companies and Local 807 of the International Brotherhood of Teamsters. The workers requested a wage increase, an employer-financed welfare fund amounting to 1 percent of the pay roll, and an extra week's vacation. In negotiations prior to the strike, an area-wide union committee, representing 12 locals in the metropolitan area, and delegations from 5 employer associations, assisted by State, city, and Federal mediators, had arrived at a tentative agreement providing for an hourly increase of 15 cents, with no welfare provisions. This was rejected by the rank and file membership of Local 807, while officials of Locals 282 and 816 accepted it for their members. On September 7, the striking truck drivers in New York City were joined by over 3,000 drivers in Essex and Union Counties,

New Jersey, members of Newark Local 478. Three days later Local 807 which was demanding a 25-cents-an-hour increase and a welfare plan, modified its demands to 17½ cents an hour with a welfare plan and began to sign agreements with individual employers. Local 282, whose members had engaged in a short sympathy walk-out with Local 807, continued to demand 25 cents an hour increase while endeavoring to keep its men at work.

On September 18, united resistance of major employers to wage demands was broken as individual companies began signing with Local 807 on its terms. Within a few days most of the workers were back on their jobs with different wage rates for different locals. Some workers had received hourly increases of 15 cents and some 17½ cents, while for others negotiations for a 25-cent increase were still in progress.

Termination of Boeing Stoppage in Seattle

The stoppage at the Boeing Airplane Co. w called off by the Aeronautical Mechanics Uni (part of the International Association of Machi ists, Ind.) on September 10, following a vote the local membership. The stoppage, whi originally involved nearly 15,000 workers, beg April 22. Since early summer the company w hiring all strikers and nonstrikers who wou pass through the picket lines and offered to reh as soon as possible all former employees exce 30 strikers whom it termed "subversive." Ho ever, it indicated that expansion of assemb operations would have to await stepped-u production in the shops. Available reports in cate that approximately 8,000 of the 14,0 vacancies were filled before the union called the strike.

Technical Notes

Revision of Retail Food Price Index in August 1947 [1]

TWO SAMPLE REVISIONS were introduced into the retail food price index by the Bureau of Labor Statistics in August 1947, after an evaluation of the list of foods included and the number of price quotations obtained for each food. These revisions followed the Bureau's policy of continuous reappraisal of its indexes and coincided with a reduction in the funds available for food price work for the fiscal year 1948.

The list of foods included in the index was reduced from 62 to 50.[2] Thirteen foods were discontinued; one food—rice—was reintroduced into the index for the first time since August 1939.

The number of price quotations per item per city remained unchanged for meats and fresh fruits and vegetables, for which variation in price from store to store is greater than for dry groceries and staples. The number of quotations obtained from independent stores for dry groceries and staples (foods other than meats and fresh fruits and vegetables) was reduced so that the degree of accuracy in average prices for these foods as measured by the "standard error of the mean" would be more in line with that for meats and produce. This reduction diminished by 20 percent the number of quotations obtained from independent stores. No change was made in the size of the sample of quotations from chain stores for any of the 50 foods.

Tests made by the Bureau showed that the reduction in number of foods priced and in number of quotations obtained has had no significant effect on the all-foods index or the average food prices for all cities combined. A considerable saving has resulted from this revision, both in collection and processing time.

The Bureau has continued to use prices obtained in 56 cities monthly for computing the retail food price index. Indexes for groups and subgroups of foods were continued unchanged except for the addition of a subgroup for *meats (excluding poultry and fish)*.

Number of Foods

For the purpose of deriving the minimum number of foods necessary to produce an accurate national index of retail food prices, the list of 71 foods [3] formerly priced by the Bureau was examined carefully. Two criteria were considered of primary importance in this examination—the relationship of price movements among the various foods and the relative importance of each food in the index. A study of the relationship of price movements revealed, for example, that the average price of whole wheat and of rye bread moved about the same as that of white bread; the price of sliced ham, about the same as whole ham; the price of shortening other than hydrogenated, about the same as hydrogenated shortening, etc. Further, the prices of certain foods, such as tea, with a relative importance of 0.1 percent in the food index, and corn sirup and peanut butter, each with a relative importance of 0.2 percent, had a negligible influence on the all-foods index and on their own group indexes.

Following this examination, a preliminary list of 44 foods was selected from the 71 foods formerly priced. The weights for the 18 deleted foods were assigned to the remaining 44 foods and indexes

[1] Prepared by Willard Fazar of the Bureau's Division of Prices and Cost of Living. Based on statistical data and interpretive material compiled by Lillian Leikind.

[2] Both store and delivered milk are included in these figures.

[3] 62 of these foods were included in the index prior to September 1947.

computed quarterly for the period March 1939 through February 1947. A comparison of the proposed 44-food index with the published 62-food index is shown in table 1. The greatest divergence in level between the 2 indexes is 1 index point, with the majority of differences between 0.2 and 0.3 of an index point. Had the index of 44 foods been linked to the March 1939 index of 62 foods (as was the procedure for introducing the final list of 50 foods), the differences would have been reduced. In measurement of trend, the divergence between the indexes is quite small, the greatest difference being 0.3 of a percentage point. Comparisons between the major group indexes, based on 44 and 62 foods (see table 1) also show minor differences.

TABLE 1.—*Comparison of 62-food and 44-food retail food price indexes, all foods and major commodity groups, 56 cities combined, quarterly 1939–46 and February 1947*

[1935–39=100]

Month and year	All foods				Cereals and bakery products		Meats		Dairy products		Fruits and vegetables		Fats and oils	
	Retail price indexes based on—		Percent change from previous dates, index based on—											
	62 foods	44 foods	62 foods	44 foods	62 foods	44 foods	62 foods	44 foods	62 foods	44 foods	62 foods	44 foods	62 foods	44 foods
1939: March	94.6	94.2			94.6	94.1	97.1	97.0	95.7	94.8	94.3	94.3	88.2	88.1
June	93.6	93.3	−1.1	−1.0	93.6	93.5	96.7	96.5	90.5	89.6	96.2	96.2	86.3	86.1
September	98.4	98.2	+5.1	+5.3	94.5	94.3	101.0	100.8	98.2	97.6	94.4	94.5	92.3	92.7
December	94.9	94.6	−3.6	−3.7	95.1	94.8	91.7	91.4	102.2	101.8	91.9	91.9	86.0	86.1
1940: March	95.6	95.5	+0.7	+1.0	97.9	98.1	91.0	90.9	102.3	102.0	99.4	99.4	83.5	83.4
June	98.3	98.1	+2.8	+2.7	97.7	97.7	96.0	95.7	98.2	98.0	110.6	110.6	82.0	82.0
September	97.2	96.9	−1.1	−1.2	96.2	95.9	102.4	102.1	99.7	99.5	90.4	90.4	81.3	81.4
December	97.3	97.2	+0.1	+0.3	94.8	94.6	97.4	97.1	107.4	108.3	90.4	90.4	80.1	80.1
1941: March	98.4	98.2	+1.1	+1.0	95.1	95.0	102.5	102.2	104.6	104.5	97.1	97.1	81.3	81.2
June	105.9	105.8	+7.6	+7.7	95.9	96.0	106.8	106.5	109.7	109.9	112.1	112.1	92.5	92.1
September	110.7	110.5	+4.5	+4.4	100.9	101.6	115.5	114.9	118.5	117.7	100.5	100.6	103.0	102.4
December	113.1	112.6	+2.2	+1.9	102.5	103.2	111.1	110.5	120.5	118.8	110.5	110.5	108.5	108.1
1942: March	118.6	118.2	+4.9	+5.0	104.8	105.6	120.5	120.0	121.7	120.3	123.4	123.4	116.8	116.1
June	123.2	122.8	+3.9	+3.9	105.1	105.7	126.6	125.8	122.1	121.4	133.8	133.8	120.0	118.7
September	126.6	126.5	+2.8	+3.0	105.4	106.1	130.6	129.9	127.7	128.4	129.7	129.6	120.7	119.0
December	132.7	132.7	+4.8	+4.9	105.8	106.5	133.2	132.5	132.3	133.2	146.6	146.6	125.3	123.0
1946: March	140.1	139.8	+5.6	+5.4	110.3	111.3	131.3	131.0	137.0	136.1	183.4	182.4	125.9	123.0
June	145.6	145.1	+3.9	+3.8	122.1	122.7	134.0	133.3	147.8	147.2	183.5	182.6	126.4	123.2
September	174.1	173.2	+19.6	+19.4	137.3	138.3	188.5	186.9	185.0	186.6	176.4	175.7	151.4	150.6
December	185.9	184.9	+6.8	+6.8	141.6	142.2	197.8	195.8	200.9	199.0	185.0	184.1	207.3	209.7
1947: February	182.3	181.3	−1.9	−1.9	144.1	144.3	196.7	195.8	183.2	179.4	191.7	190.7	201.3	202.7
March 1939 to February 1947			+92.7	+92.5										
March 1946 to February 1947			+30.1	+29.7										

At this point in its analysis, the Bureau had derived a basic list of 44 foods that would serve about as well as the former 62-food list for producing a national index. Further examination with regard to the needs for the maintenance of retail food price indexes for individual cities, however, indicated the need for restoring certain foods formerly priced but not included among the 44. Corn meal and salt pork had been dropped because of their small relative importance in the national index. These were restored because of their importance in southern cities. A few foods of considerable relative importance (chuck roast, store milk, and cheese) had been dropped because their price movements closely paralleled related items in the 44-food list. These were restored because of their heavy individual weights in the index. Rice, one of the 9 non-index foods formerly priced, was re-introduced into the index because of its importance in the consumption habits of some nationality and regional groups. Restoration of these 6 foods brought the final list of foods for inclusion in the index to 50.

Table 2 presents the list of 71 foods formerly priced, the 50 foods selected for the revised index, the foods for which pricing was eliminated, and the foods to which the weight of eliminated foods was allocated or imputed.

TABLE 2.—*List of foods formerly priced, foods in revised index, foods eliminated, and imputation of weights*

Foods formerly priced	Original year of pricing	Relative importance in foods index, April 1947	Foods in revised index	Foods eliminated	Foods to which weight imputed
		Percent			
Cereals and bakery products		13.7			
Flour, wheat	1890	2.2	Flour, wheat		
Macaroni	1919	.7		Macaroni	Cereals and bakery products.
Corn flakes	1919	.5	Corn flakes		
Corn meal	1890	.4	Corn meal		
Rolled oats	1919	.5	Rolled oats		
Bread, white	1913	5.6	Bread, white		
Bread, whole wheat	1934	.7		Bread, whole wheat	Bread, white.
Bread, rye	1933	1.0		Bread, rye	Bread, white.
Vanilla cookies	1939	1.6	Vanilla cookies		
Soda crackers	1935	.5		Soda crackers	Cereals and bakery products.
Rice	1913	(1)	Rice		
Meats		30.2			
Beef: Round steak	1890	3.7	Round steak		
Rib roast	1907	3.4	Rib roast		
Chuck roast	1913	1.5	Chuck roast		
Liver	1935–36 and 1943	.9		Liver	Beef.
Hamburger	1943	1.4	Hamburger		
Veal: Cutlets	1935	1.9	Cutlets		
Roast	1943	(1)		Roast	
Pork: Chops	1890	3.7	Chops		
Bacon, sliced	1890	2.1	Bacon, sliced		
Ham, sliced	1890	.9		Ham, sliced	Ham, whole.
Ham, whole	1935	1.6	Ham, whole		
Salt pork	1935	.4	Salt pork		
Sausage	1943	(1)		Sausage	
Lamb: Leg	1913	1.4	Leg		
Rib chops	1935	1.3		Rib chops	Leg.
Poultry: Roasting chickens	1890	3.0	Roasting chickens		
Fish: Fish, fresh or frozen	1938	2.1	Fish, fresh or frozen		
Salmon, pink, canned	1935	.9	Salmon, pink, canned		
Salmon, red, canned	1915	(1)		Salmon, red, canned	
Dairy products		18.4			
Butter	1890	5.9	Butter		
Cheese	1913	1.9	Cheese		
Milk, fresh (delivered)	1890	6.8	Milk, fresh (delivered)		
Milk, fresh (grocery)	1936	2.8	Milk, fresh (grocery)		
Milk, evaporated	1919	1.1	Milk, evaporated		
Eggs		5.1			
Eggs, fresh	1890	5.1	Eggs, fresh		
Fruits and vegetables		22.2			
Apples	1934	3.0	Apples		
Bananas	1919	1.9	Bananas		
Oranges	1919	2.6	Oranges		
Grapefruit	1941	(1)		Grapefruit	
Beans, green	1934	1.1	Beans, green		
Cabbage	1919	.6	Cabbage		
Carrots	1934	.8	Carrots		
Lettuce	1934	1.2	Lettuce		
Onions	1915	.9	Onions		
Potatoes	1890	3.5	Potatoes		
Spinach	1934	.8	Spinach		
Sweetpotatoes	1934	.5	Sweetpotatoes		
Peaches, canned	1935	.5	Peaches, canned		
Pineapple, canned	1935	.3	Pineapple, canned		
Grapefruit juice, canned	1941	.1		Grapefruit juice, canned	Canned fruits.
Beans, green, canned	1935	.2		Beans, green, canned	Canned vegetables.
Corn, canned	1919	.5	Corn, canned		
Peas, canned	1919	.4	Peas, canned		
Tomatoes, canned	1919	1.7	Tomatoes, canned		
Vegetable soup	1943	(1)		Vegetable soup	
Prunes, dried	1915	.9	Prunes, dried		
Navy beans, dried	1915	.7	Navy beans, dried		
Beverages		3.0			
Coffee	1913	2.9	Coffee		
Tea	1913	.1		Tea	Coffee.
Cocoa	1935	(1)		Cocoa	
Fats and oils		4.2			
Lard	1890	1.5	Lard		
Standard shortening	1935	.4		Standard shortening	Oleomargarine.
Hydrogenated shortening	1919	.7	Hydrogenated shortening		
Salad dressing	1940	.9	Salad dressing		
Oleomargarine	1919	.5	Oleomargarine		
Peanut butter	1935	.2		Peanut butter	Fats and oils.
Cooking or salad oil	1935–36 and 1943	(1)		Cooking or salad oil	
Sugar and sweets		3.2			
Sugar	1890	3.0	Sugar		
Corn sirup	1935	.2		Corn sirup	Sugar.
Molasses	1935	(1)		Molasses	

[1] Not included in index.

Number of Quotations

Although the number and composition of the sample of reporters remain constant each month, the number of quotations obtained by the Bureau in a city varies considerably among foods. Price variations among stores result from differences in types of food sold, errors in reporting, refinements in food specifications, and food shortages, seasonal or otherwise. Prices of staples like sugar and bread fluctuate relatively little from time to time and vary but slightly from store to store at a given time. Prices of perishables like lettuce or round steak may fluctuate violently within a few days and vary considerably from store to store at a given time.

Analysis of the number of quotations needed for the different foods was confined to a study of independent store quotations, since the Bureau has an extensive coverage of chain stores as described under Sample of Reporters. The relative sampling errors in independent store average prices, *before* taking into account the method of selecting the store samples (stratification), range up to 5 percent, with the majority of foods at less than 3 percent. The sampling errors in the published city-wide average prices of these foods for chain and independent stores combined are only about one-half of those for independent stores only, since there is practically complete coverage of the food chain organizations, the quotations from which represent approximately 50 percent of the total weight for most foods. For example, if the independent store average price of food A is 50 cents and has a sampling error of 3 percent or 1½ cents, then the chances are 2 out of 3 that the actual independent store average would be between 48½ and 51½ cents. The chain store average price is also 50 cents and has practically no sampling error. In combining the chain and independent store average prices, using a 50–50 chain-independent store ratio,[4] the published average price for all stores would have approximately half the error of that for independents alone and the true city-wide average price would fall somewhere between [illegible] cents plus or minus ¾ cents.[5]

Table 3 shows a summary of the sampling erro[illegible] in independent store quotations for the 61 food[illegible] formerly priced for New York and Chicago [illegible] March 1947. In general, the sampling errors [illegible] independent store average prices of the staples a[illegible] dry groceries were significantly lower than tho[illegible] for meats or fresh fruits and vegetables. In Ne[illegible] York, for example, the relative sampling errors [illegible]

TABLE 3.—*Distribution of sampling errors[1] in average re[illegible] food prices reported by independent stores, New York a[illegible] Chicago, March 1947*

Sampling error	Number of average retail food pric[illegible]					
	Total		Meats and produce		Staples and othe[illegible] groceries	
	New York	Chicago	New York	Chicago	New York	Chi[illegible] cago
Cents:						
0.0–0.5	36	38	8	9	28	[illegible]
0.6–1.0	13	15	8	10	5	
1.1–1.5	5	5	4	4	1	
1.6–2.0	5	3	3	2	2	
2.1–2.5	1	0	1	0	0	
2.6–3.0	1	0	1	0	0	
3.1 and over	0	0	0	0	0	
Total	61	61	25	25	36	[illegible]
Percent of average price:						
0.0–0.5	6	6	0	0	6	
0.6–1.0	12	13	1	1	11	[illegible]
1.1–1.5	13	12	7	7	6	
1.6–2.0	6	14	2	8	4	
2.1–2.5	9	9	4	5	5	
2.6–3.0	5	5	4	3	1	
3.1–3.5	5	1	4	0	1	
3.6–4.0	4	1	2	1	2	
4.1 and over	1	0	1	0	0	
Total	61	61	25	25	36	[illegible]

[1] Computed without regard to stratification among independent stor[illegible]

average prices of independent stores for th[illegible] majority of the staples were less than 2 percent with almost half at less than 1 percent. Amon[illegible] meats and produce, the sampling errors in th[illegible] average prices of the majority of foods were be[illegible] tween 1 and 3 percent; only one was less than [illegible] percent. The sampling errors in average foo[illegible] prices show a similar distribution for other citie[illegible] and for the averages for all cities combined.

[4] The actual weight of chain store prices in the national retail food price index is 45 percent and that of independent store prices is 55 percent.

[5] This is based on the standard stratification formula for computing stan[illegible] ard error.

[6] Excludes delivered milk for which prices are obtained from dairies.

The desirability of attaining some uniformity in the sampling errors among the average prices of the various foods led to the proposal that the Bureau either (1) extend its coverage of independent stores in order to obtain a significantly larger sample of quotations for meats and produce or (2) reduce the number of quotations obtained for staples and dry groceries. The first alternative would have reduced the sampling errors for meats and produce; the second alternative would have increased the errors for staples. Although the latter alternative was used, either method would have achieved greater uniformity in sampling errors among all foods priced. The method chosen reduced the collection and processing costs for the Bureau and eliminated for some foods the collection of more prices than needed for reasonable accuracy. A reduction in the number of quotations obtained for staples was put into effect by obtaining prices for staples from only 50 percent of the Bureau's independent store reporters that formerly quoted such prices. Stores no longer required to report prices of staples were continued as reporters of meat and produce prices, however. Because of the low degree of price variability among staples, this reduction in number of quotations did not seriously impair the accuracy of the Bureau's average prices or indexes.

Sample of Reporters

Whenever a revision of the Bureau's retail food price work is undertaken, the sample of retail food stores is reviewed. After careful examination of the sample of reporters prior to August 1947,[7] no material change was made in the number or composition of reporters.

Retail food prices are obtained from all important chain organizations in each city. Because of efficiency in collection procedure,[8] accuracy and completeness of reports, and their importance in the grocery business, there was no particular need for examination of the chain store sample.

[7] For a description of the sample, see Store Samples for Retail Food Prices in Monthly Labor Review, January 1947.

[8] Local or regional headquarters report the prices prevailing in their various stores in each city. Some 275 chain organizations report prices each month for about 8,500 chain stores in 56 cities.

The sample of independent stores, last revised in 1945–46, has remained essentially the same, except for a few stores dropped in August 1947. These were certain stores handling staples only and were not needed in view of the reduced number of quotations desired for staples. All types of food stores, as classified by kind of foods handled, sales-volume class, and geographic area in each city, are represented in the sample in proportion to their sales volume importance in the city. Among cities, the number of independent stores in the sample varies from 12 in Butte (Mont.) to 120 in New York City.

TABLE 4.—*Comparisons of sampling errors in average retail prices of certain foods, computed with and without stratification among independent stores, March 1947*

Food and unit	New York City			Washington, D. C.		
	Average price	Sampling error		Average price	Sampling error	
		Without stratification	With stratification [1]		Without stratification	With stratification [2]
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Flour, 5 lb.	47.5	0.52	0.51	45.8	0.63	0.43
Round steak, lb.	75.2	.96	.44	68.1	1.02	1.02
Pork chops, lb.	73.0	.91	.82	71.9	.94	.84
Butter, lb.	85.1	.41	.31	88.0	.62	.58
Eggs, doz.	69.0	.49	.41	65.5	.86	.84
Apples, lb.	15.9	.39	.36	13.4	.40	.38
Potatoes, 15 lb.	77.5	1.05	.91	70.4	1.25	1.04
Coffee, lb.	52.7	.47	.47	50.0	.44	.41
Lard, lb.	40.7	.54	.50	42.1	.93	.93

[1] Independent store reporters, stratified by types of commodities handled.
[2] Independent store reporters, stratified by sales volume class.

A proportional relationship in sample size from city to city and the stratification of the samples by type of store and the other classifications mentioned above have produced moderate sampling errors in the individual city food aggregates, ranging from about 0.6 percent in New York, the city with the largest sample and a weight of 11.8 percent in the index, to an estimated 1.7 percent in Butte, the city with the smallest sample and a weight of only 0.1 percent in the index. The error in the food indexes for these cities is of course smaller than the error in the city food aggregates for any one period, since there is also an error of approximately the same size in the

aggregate for the base period.[9] The sampling error of the revised all-foods index for all cities combined was estimated at considerably less than 1 percent—about 0.3 percent when adjustments are made to account for the method of selecting store samples.

The sampling errors discussed above were computed by using prices from the sample of stores, assuming that complete random sample selection procedures were used. These are greater than would be true of the published prices, since the Bureau's samples of stores are "stratified" samples. Table 4 compares sampling errors for New York and Washington computed (1) by assuming random selection and (2) by assuming that the stores were first classified by types of commodities handled or by sales volume. In New York, sampling errors in the March 1947 average prices of 8 out of 9 important foods were smaller when computed with regard to one of the controls on the selection of the independent store sample—types of commodities handled. In Washington, sampling errors for 7 out of 9 important foods were smaller when computed with regard to stratification by sales-volume class than without regard to such stratification.

As the size of the sample of reporting stores becomes progressively smaller in accordance with the size of the city, the sampling errors become larger. Among the 56 cities included in the Bureau's retail food price index, the sampling errors for all cities probably fall between those for New York and Butte, the largest and smallest cities in the index. Because each quotation obtained in New York has a much greater importance in the national index than a quotation from Butte, it was desirable to continue the proportional relationships previously established between the number of independent stores in the sample and the total number of stores in each city.

[9] The sampling error in the all-foods index for both New York and Chicago between February and March 1947 was 0.2 percent.

Revised Indexes of Agricultural Machinery and Equipment Prices [1]

THE BUREAU OF LABOR STATISTICS recently completed a major revision of the agricultural machinery and equipment section of its primary market price index.

Prices of agricultural machinery were first introduced into the primary market price index in 1926. At that time, data reaching as far back as 1913 were collected, and a continuous series of monthly indexes was constructed, beginning with January of that year. In 1931, the number of implements included in the product sample was increased. In 1935, as a result of a thorough study of its wholesale price data, the Bureau instituted a major change in the sample of firms and commodities in the agricultural implements subgroup. Prior to that time, each price series in the index consisted of quotations from an important manufacturer of each item. After the 1935 revision, each series consisted of a composite of prices obtained from two to eight manufacturers of each product. The prices of the 40 machines included in that revision represented 150 quotations from 31 different manufacturers. Prices from January 1913 were reported by these manufacturers, and the index of farm-machinery prices was reconstructed from that date forward.[2]

The 1947 revision of the index of primary market prices of agricultural machinery and equipment consisted of the addition and substitution of certain machines, largely of the tractor-drawn and particularly of the tractor-mounted types, in line with current agricultural practices, and the addition of more farm equipment, such as cattle stalls, stanchions, brooders, and incubators. Forty-two farm machines and 14 items of other agricultural equipment are included in the new index. The price for each machine in the revised index is an average of quotations, in most cases from 3 representative manufacturers of the item. The weights are based on recent data from the Bureau of the Census. The revised index was linked to the two former series of "farm machinery" and "agricultural implements" in December 1947, so that continuous series of index numbers of "farm machinery" and "agricultural machinery and equipment" (formerly "agricultural implements") are available, by months, from January 1913.

[1] By Elizabeth V. Minson of the Bureau's Branch of Industrial Prices.

[2] See Monthly Labor Review, August 1935 (p. 526): Revised Indexes of Wholesale Prices of Farm Machinery. (Reprinted as Serial No. R. 274.)

Commodity Sample

The Bureau had the full cooperation of the industry through the committee on statistics of the Farm Equipment Institute in this revision. Representatives from the Department of Agriculture also provided technical advice as to specifications in selection of the machines used in the sample. The present sample, as shown below, includes the important types of equipment used in the different kinds of farming in various sections of the United States.

Farm Machinery

Corn planter, horse-drawn, 2-row.
Corn planter, tractor-drawn, 2-row.
Corn and cotton planter, attachments for tractor-mounted cultivator, 2-row.
Grain drill, plain, tractor-drawn, 20 discs.
Manure spreader, tractor-drawn, 2-wheel.
Manure spreader, horse-draw, 4-wheel.
Plow, moldboard, tractor-drawn, 2-bottom.
Plow, moldboard, tractor-mounted, 1-bottom, 1 way.
Plow, disc, tractor-drawn, 1 way, 9- to 12-foot cut.
Plow, disc, tractor-drawn or direct connected, 2 discs.
Middlebuster, mounted, 2-row.
Harrow, spike tooth, drawn, 2-section, 60 teeth, with drawbar.
Harrow, spring tooth, horse-drawn, 2- or 3-section, 15 to 23 teeth.
Harrow, disc, tractor-drawn, tandem type, 7-foot cut, 16-inch discs.
Cultivator, tractor-mounted, 2-row.
Cultivator, drawn, 6½- to 7-foot, power lift.
Binder, grain, horse-drawn, 8-foot.
Forage harvester, tractor-drawn, field or row type.
Combine (harvester-thresher), pull type, 5- to 6-foot cut.
Combine (harvester-thresher), pull type, 12-foot cut.
Combine (harvester-thresher), self-propelled type, 12-foot cut.
Corn picker, pull type, tractor-drawn, 1-row.
Corn picker, tractor-mounted or semimounted, 1- or 2-row, with elevator.
Potato digger, tractor-drawn, 2-row.
Beet harvester and loader, drawn.
Mower, horse-drawn, 5-foot cut.
Mower, trailer type, 7-foot cut, power take-off drive, tractor-mounted or semimounted.
Rake, side delivery, tractor-drawn.
Hay loader, 6-foot, drawn.
Pickup hay baler, drawn, self or hand tie.
Ensilage cutter, silo filler, 14- to 16-inch throat size, mounted on truck, steel wheels.
Corn sheller, power operated.
Hammer mill.
Tractor, wheel type (except all-purpose), 3-4 plows, 30- to 49-belt h. p., rubber tires.
Tractor, wheel type, all-purpose, under 15-belt h. p., rubber tires.
Tractor, wheel type, all-purpose, 20- to 28-belt h. p., rubber tires.

Tractor, wheel type, all-purpose, 30-belt h. p., and over, rubber tires.
Tractor, tracklaying type, 30- to 40-drawbar h. p., diesel engine.
Wagon, 4-wheel, rubber tires (no bed), tractor-drawn.
Spraying outfit, power, drawn, gasoline engine, 9 to 11 gal. per min.
Duster, power.
Elevator, farm, open flight, portable, 24- to 40-foot length, with truck.

Agricultural Equipment

Milking machine, portable.
Cream separator, 500- to 800-pound capacity.
Milk cooler, 6-can.
Brooder, floor, oil.
Incubator, electrically heated, various egg capacities.
Cattle stall, without stanchion.
Cattle stanchion, wood-lined or plain, chain-hung.
Stock tank, round, 20- or 22-gauge galvanized steel, 6-foot diameter, 2-foot depth.
Sprayer, hand, galvanized tank, 3½- or 4-gallon capacity.
Engine, 3 to 6 h. p., water or air cooled.
Electric plant, farm, 1500 to 3500 watts, 115 volts, 60 cycles, a. c., gasoline engine.
Water system, deep well, ½ h. p. electric motor, 40- to 42-gallon capacity pressure tank.
Water system, shallow well, centrifugal or reciprocating pump, 340 to 500 gallons per hour, ¼ to ½ h. p.
Windmill, steel, 8-foot diameter.

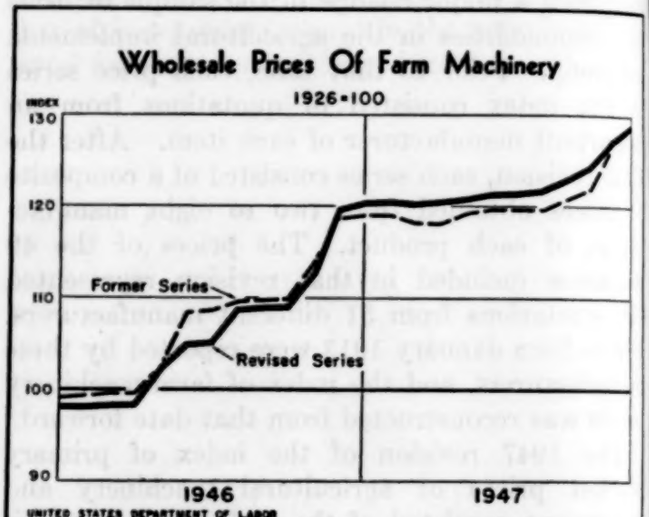
The items listed in the sample are designated as the agricultural machinery and equipment subgroup of the metals and metal products group. Small hand tools such as shovels, rakes, and hoes, which were included in the former classification, other agricultural implements, have been transferred to the iron and steel subgroup of metals and metal products.

Firm Sample

Approximately 70 manufacturers of agricultural machinery and equipment are cooperating with the Bureau by furnishing price data on about 250 items each month. They are well scattered throughout the principal production centers for farm equipment, and represent a cross section of both large and small producers. These firms were selected on the basis of their importance in producing the individual machines included in the index, and not on the basis of the total volume of their production of all types of farm machinery and equipment. Prices from three representative producers of each product are used in the index. The sources of the price data are confidential.

Prices and Indexes

Generally, four reporters have furnished a complete historical record of changes in prices and specifications from January 1946 on each product. Prices from three reporters are combined into an unweighted arithmetic average to form the composite price series used in the index,[1] and certain additional quotations are retained as stand-by series. The primary market level—i. e., the first commercial transaction price—is used. According to the 1939 Census of Business, nearly 83 percent of the sales of agricultural machinery, exclusive of tractors, were to wholesalers (including manufacturers' wholesale branches) and to jobbers; and over 95 percent of the tractors for farm use were distributed to these two classes of customers. All trade discounts are deducted; cash discounts are not deducted. When prices are obtained from cooperatives, the billing price of the manufacturer to the cooperative is used.

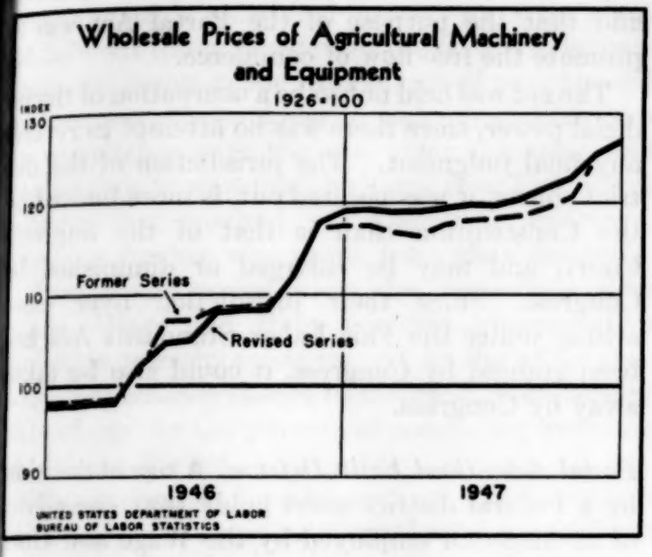


Specifications for farm machinery, as for most other highly fabricated products, change frequently. When major changes in specifications occur, the price for the new machine is linked into the index so as not to affect the level of the index if it can be determined that there would have been no adjustment in the price of the old machine had the manufacturer continued to produce it. When changes in price and specifications are made simultaneously, the Bureau obtains, if possible, the value of the specification modification, and the index reflects only the

[1] Composite average prices for the various machines included in the index were published in Average Wholesale Prices and Index Numbers of Individual Commodities in April 1948 (mimeographed report).

amount of the change represented by price movement.

The 1941 domestic sales values of farm machinery, as reported by the Bureau of the Census in its "Facts for Industry" series, are the basic weight data. The 1941 total value was adjusted by the percentage change shown between 1941 and 1946 in the Bureau of Labor Statistics index



of prices of agricultural implements. This adjusted total was apportioned according to the relative importance of domestic shipments of each type of machine in 1946. These values, in turn, were divided by the average 1946 price per unit as calculated by BLS, to obtain a quantity multiplier for each machine. The computed physical quantities are the weights used in the calculation of the index.

The revised indexes for farm machinery and for agricultural machinery and equipment were linked to the former series for farm machinery and agricultural implements, respectively, in December 1947. They are available from January 1946, thus making possible a monthly comparison of the former and revised series for a period of 2 years. The revised subgroup of agricultural machinery and equipment was linked into the metals and metal products group index in December 1947. The results of the revised subgroup of agricultural machinery and equipment was first reflected in the indexes of metals and metal products, all commodities, and other affected groups, in February 1948. This is in accordance with the Bureau's policy in that during the period of a major revision in the primary market price index, such as is now in progress, the linking of a revised subgroup into the group index or other affected indexes occurs at the time the revision is completed. The new indexes for the revised subgroup, however, are published for the entire period covered by the revision. The revised indexes for farm machinery and for agricultural machinery and equipment and the former series for farm machinery and for agricultural implements are shown in the accompanying table and charts.

Index numbers of wholesale prices of agricultural machinery and equipment

[1926=100]

Year and month	Farm machinery		Agricultural machinery and equipment	Agricultural implements
	Revised series	Former series	Revised series	Former series
1946: Average	105.3	106.7	104.8	105.5
January	98.0	99.1	97.9	98.1
February	98.0	99.2	97.9	98.1
March	98.2	99.6	98.0	98.5
April	98.2	99.6	98.1	98.6
May	102.2	102.7	102.0	101.7
June	104.9	108.4	104.5	107.0
July	105.0	108.7	104.8	107.2
August	108.8	109.7	108.0	108.5
September	108.9	109.8	108.2	108.6
October	109.0	109.9	108.3	108.7
November	112.8	113.8	111.7	112.5
December	119.6	118.6	117.9	117.1
1947: Average	122.5	121.0	121.1	119.6
January	120.4	119.0	119.1	117.5
February	120.5	119.0	119.3	117.6
March	120.4	118.2	119.1	116.8
April	120.5	118.0	119.1	116.6
May	120.8	119.2	119.5	117.8
June	121.2	119.7	119.9	118.2
July	121.2	119.7	119.9	118.4
August	121.6	119.7	120.4	118.6
September	122.8	120.8	121.6	119.6
October	124.1	121.8	122.8	120.7
November	127.0	126.7	125.5	125.3
December	128.6	128.6	127.0	127.0

Recent Decisions of Interest to Labor[1]

Wages and Hours[2]

Portal Act—Constitutionality. The Sixth Circuit Court of Appeals has again upheld[3] the validity of the Portal-to-Portal Act of 1947. In a previous case,[4] the court upheld the validity of sections 9 and 11 of the act (the "good faith" defense). In the instant case, the court upheld the validity of section 2, which relieves employers from liability under the Fair Labor Standards Act for employees' activities engaged in prior to enactment of the Portal Act, which were not compensable by reason of their contract of employment or by reason of any custom or practice of the employer. Section 2 also deprives State and Federal courts of jurisdiction in suits for compensation for such activities under the Fair Labor Standards Act.

The "work" for which compensation was alleged to be due consisted of walking time and other preliminary activities, which the court held were not compensable within the meaning of section 2. The act was not an unconstitutional deprivation of vested rights of the employees, the court pointed out; a vested right is an immediate right to the present or future enjoyment of property, and not a mere expectancy. The right to compensation for portal-to-portal activities, had been created by provisions of the Fair Labor Standards Act, as construed by certain decisions of the United States Supreme Court. That right was subject to change by subsequent legislation or decisions, which might reasonably have been anticipated. The court pointed out that retroactive laws have been upheld in civil cases when no vested right was at stake. At any rate, such rights were held subject to the power of Congress over interstate commerce. Congress, in its statement of findings and policy in section 1 of the Portal Act, declared that the interpretation of the fair Labor Standards Act by the Supreme Court[5] created a burden on commerce, and that the purpose of the Portal Act was to promote the free flow of commerce.

The act was held not to be a usurpation of the judicial power, since there was no attempt to reverse any final judgment. The jurisdiction of the district courts, it was pointed out, is more limited by the Constitution than is that of the Supreme Court, and may be enlarged or diminished by Congress. Since their jurisdiction over cases arising under the Fair Labor Standards Act had been granted by Congress, it could also be taken away by Congress.

Portal Act—Good Faith Defense. A recent decision[6] by a Federal district court holds that the advice of an inspector employed by the Wage and Hour Division of the U. S. Department of Labor is not an administrative regulation, order, ruling, approval, or interpretation, or an administrative practice or enforcement policy of an agency of the United States within the meaning of section 9 of the Portal-to-Portal Act. Section 9 exonerates employers from liability under the Fair Labor Standards Act for acts or omissions made in good faith in reliance on such a regulation, ruling, order, approval, interpretation, practice, or enforcement policy.

The employer had, until May 1943, erroneously excluded from the employees' "regular rate" of pay an incentive bonus paid to them for time saved in finishing particular tasks. The court held that since the bonus was considered part of the regular compensation and not a gratuity, it was clearly includible in computing the employees' regular rate of pay. The court also refused to allow extra pay for work on Sundays and holidays to be credited against weekly overtime compensation due under the act.

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[1] Prepared in the Office of the Solicitor, U. S. Department of Labor. The cases covered in this article represent a selection of the significant decisions believed to be of special interest. No attempt has been made to reflect all recent judical and administrative developments in the field of labor law or to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached, based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

[2] This section is intended merely as a digest of some recent decisions involving the Fair Labor Standards Act and the Portal-to-Portal Act. It is not to be construed and may not be relied upon as interpretation of these acts by the Administrator of the Wage and Hour Division or any agency of the Department of Labor.

[3] *Fisch* v. *General Motors Corp.* (U. S. C. C. A. (6th), Aug. 2, 1948).

[4] *Rogers Cartage Co.* v. *Reynolds*, 166 F. (2d) 317.

[5] *Anderson* v. *Mount Clements Pottery Co.* (328 U. S. 680).

[6] *Burke* v. *Mesta Machine Co.* (U. S. D. C., W. D. Pa., July 27, 1948).

The employing company contended that it was relieved of any possible liability because it had acted in reliance upon the statements of certain inspectors of the Wage and Hour Division. The first inspector visited the plant in 1940 and, upon examination of the pay-roll records and after questioning employees, advised the auditor of the plant that everything was in order except the method of keeping records. Three other inspectors, who made individual inspections of the plant at different times, questioned the failure to include incentive bonus in the regular rate of pay, but did not request the employer to make any alterations in compliance with the act. One inspector told the auditor to wait until he heard from him before altering his method of computing overtime. Nothing further was heard from that inspector.

During the period when the inspections were made, Wage and Hour Division interpretative bulletins were in existence, all to the effect that incentive bonuses should be included in the regular rate of pay for the purpose of computing overtime due under the act.

The actions and statements of the inspectors in this case, the court held, could not be considered rulings, approvals, or interpretations of an agency of the United States. The intent of Congress in enacting the Portal Act, the court pointed out, had been to allow reliance only on the words or actions of responsible officials authorized to make regulations, rulings, orders, interpretations, or approvals. Inspectors were clearly not so authorized. Under the well-settled practice of the Wage and Hour Division, only the Administrator or Deputy Administrator (and subsequently the Solicitor of Labor) could issue interpretative bulletins, opinion letters, regulations, or rulings. The employer, being a large corporation, should have known of the existence of the interpretative bulletins expressing the opinion that incentive bonuses were includible in the regular rate of pay.

The employer claimed relief under section 11 of the Portal Act from all liquidated damages due under section 16 of the Fair Labor Standards Act. Section 11 of the Portal Act provides for exoneration of an employer from all or any part of such damages, in the discretion of the court, if the employer's error was made in good faith and he had reasonable ground for believing that his action was not in violation of the Fair Labor Standards Act.

The court refused to relieve the employer of any liquidated damages for the period prior to the visit of the first inspector, and reduced such damages by only 50 percent for the period between that visit and the date when his compliance with the act began. The failure of the inspectors to order inclusion of the bonus in computing overtime compensation was held to have given the employer some reasonable ground to believe he was not violating the act. This was counteracted, however, by the Wage and Hour Division official rulings and interpretations to the contrary, of which the employer should have known.

Portal Act—Activities During Lunch Time. A district court[7] held that employees of a shipyard could not claim compensation under the Fair Labor Standards Act for time spent at their posts of duty during a 30-minute lunch period, even though on occasions the employees performed work during that time. The court pointed out that there had never been any custom or practice by which such employees were paid for their lunch periods. Since the employment contract provided for a 30-minute period for lunch on the employees' own time, and the men knew, or should have known, of this provision in their contract, the court held that the employees' services were voluntary and not compensable within the meaning of section 2 of the Portal Act.

The majority of employees spent their lunch time away from their posts of duty, but the few who stayed at their posts for lunch did so because their lunch time was irregular and differed from that of their fellow workers. This circumstance, the court held, did not make their staying at their posts compulsory.

The time spent by these employees in actual work during the lunch period, the court concluded, was so negligible that it would not even be compensable under the U. S. Supreme Court decision[8] which it was the purpose of the Portal Act to counteract.

Labor Relations

Secondary Boycotts. Section 8 (b) (4) (A) of the National Labor Relations Act, as amended by the Taft-Hartley Act, makes it an unfair labor practice for a union to engage in, or induce the

[7] *Tully* v. *Joshua Hendy Corp.* (U. S. D. C. S. D. Calif., July 28, 1948).
[8] *Anderson* v. *Mount Clemens Pottery Co.*, (328 U. S. 680).

employees of any employer to engage in, a strike or concerted refusal to handle goods if an object of such action is to require any person to cease doing business with any other person, or to cease dealing in the products of any other person. This is the so-called "secondary boycott" prohibition. In a recent case[9] a local union was involved in a dispute with its employer, a manufacturer. A sister local union quit work because its employer was a distributor of that manufacturer's products and had refused to cease dealing in such products on the sister local's demand. The National Labor Relations Board held that such activity of the sister local constituted a secondary boycott in violation of section 8 (b) (4) (A), pointing out that the secondary boycott is illegal even if it is merely one object of union activity rather than the sole or principal object. It rejected the union's contentions that the prohibition extends only to disputes over union recognition and that the distributors were not neutrals but rather were allies of the manufacturer. It also refused to rule on the constitutionality of the section, pointing out that such ruling was a question for the courts, not for the Board.

Discharge for Abusive Language. Nonunion employees, in substantial numbers, complained to their employer on several occasions that six of their fellow employees, all of whom were union officers, had abused them by calling them insulting names such as "stool pigeon" as well as other obscene and abusive epithets. The employer dismissed the six union officers on the ground that such conduct on company property and during working hours created a serious disciplinary problem, as many of his nonunion employees had threatened to quit unless such abuse ceased. The dismissed employees charged that they had been discriminatorily fired because of their union membership. The Board ruled otherwise,[10] holding that the firings were not discriminatory because they were motivated by the misconduct of the employees and not by antiunion considerations. Two Board members dissented on the ground that the evidence indicated that the dismissals were antiunion in motive, and that the abusive language used by the dismissed employees was not a sufficient cause for discharge since such language is not uncommon among employees in manufacturing plants.

Political Expenditures by Union. A Federal district court held [11] that section 304 of the Taft-Hartley Act, which prohibits union expenditures in connection with Federal elections, is constitutional as applied to the spending of union funds for an advertisement in a commercial newspaper with a general circulation and for a radio broadcast. Both advertisement and broadcast advocated the defeat of certain representatives to a political convention called for the purpose of selecting candidates for Federal office. The court, in reply to the contention that such prohibition constituted an abridgment of the freedom of speech guaranteed by the first amendment, held that the right of the people by free elections to keep the control of their own government is "truly fundamental and preponderant even over the freedom of the first amendment. With that right gone, the ultimate power of the people to enforce their other constitutional rights will also be gone; enforcement thereafter will occur only as a matter of grace." The court took the position that the political activities of large aggregations of capital or labor may be strong enough to endanger free elections; hence, Congress has the power to restrict their political activities. It pointed out that such aggregations owe their strength to special privileges and immunities conferred upon them for their discharge of a public economic function.

No Hearing for Noncomplying Union. The Taft-Hartley Act requires unions to file certain financial and organizational data as a prerequisite to recourse by them to procedures under the act. The NLRB directed an election to determine an exclusive bargaining representative. A union which had not filed the required financial and organizational data, but which had a collective agreement with the employer involved, sought a hearing prior to the Board's directing such election. The Board refused to grant the hearing, because of the union's noncompliance. The union then sought an injunction in a Federal court against the Board, contending that its denial of a hearing violated the act and denied the noncomplying union due process of law. The court sustained [12]

[9] *In re Distillery Workers Union* (77 NLRB No. 61, July 23, 1948).
[10] *In re Sunland Biscuit Co., Inc.* (78 NLRB No. 85, July 30, 1948).
[11] *U. S.* v. *Painters Union* (U. S. D. C., D. of Conn., July 28, 1948).
[12] *Fay* v. *Douds* (U. S. D. C., S. D. N. Y., July 2, 1948).

the Board, holding that the act does not require a hearing with respect to any question which the Board is forbidden to investigate, and that the Board is forbidden to investigate any question concerning representation raised by a noncomplying union. Such denial of a hearing is constitutional, inasmuch as the Supreme Court had already sustained the constitutionality of the act's requirement that, as a condition for inclusion on the ballot in a representation election, financial and organizational data must be filed.

Hiring Halls Under the Taft-Hartley Act. The NLRB has held [13] that the hiring-hall arrangement in the maritime industry is unlawful. The union refused to enter into a collective agreement with the employer unless the latter consented to continuance of the previous hiring-hall arrangements, under which the union had referred to the employer prospective employees for available job vacancies. The evidence indicated that these previously existing arrangements had operated to discriminate in favor of the employment of union members as against nonmembers. On the basis of that finding, the Board ruled that the union's refusal to enter into a collective agreement because it did not include a provision for hiring through the union hiring hall, violated the amended National Labor Relations Act. Section 8(b)(2) of this act prohibits all union attempts to cause employers to discriminate against nonunion employees or job applicants; and section 8(b)(3) makes it an unfair labor practice for a union to refuse to bargain in good faith with the employer.

The Board based its conclusion upon the theory that an attempt to cause an employer to sign a hiring-hall agreement is an attempt to enter into an arrangement that would discriminate against nonunion employees. This would constitute a violation of the act, and a strike to compel the signing of such an agreement, the Board indicated, would be an unfair labor practice on the part of the union. With respect to the conclusion that the union had failed to bargain in good faith, the Board took the position that the act "does not permit the insistence, as a condition precedent to entering into a collective-bargaining agreement, that the other party to the negotiations agree to a provision or take some action which is unlawful or inconsistent with the basic policy of the act."

In the statement of its opinion in this case, the Board made several other rulings: (1) That a refusal by a union to bargain, in violation of section 8(b)(3), does not in itself constitute "restraint" or "coercion" of employees in the exercise of their rights, in violation of section 8(b)(1) (A); and (2) that under the Taft-Hartley Act the Board lacks authority to assess against unions money damages which result from strikes, even when such strikes are themselves violations of the act.

Veterans' Reemployment

Discharge for Cause. A circuit court of appeals held [14] that the discharge of a veteran for failure to join a union with which his employer had a closed-shop agreement was a discharge for "cause" within the meaning of the veterans' reemployment provisions of the Selective Training and Service Act of 1940. The discharge occurred prior to enactment of the Labor Management Relations Act of 1947, which prohibits the closed shop.

When the veteran was first employed, prior to entering the service, he paid for working permits required of nonmembers by the closed-shop agreement, and subsequently paid a union initiation fee. However, after his reinstatement, the veteran refused to join the union and was discharged by his employer pursuant to the closed-shop agreement.

In holding that the discharge was lawful, the appellate court ruled that a condition of employment effective before a veteran's induction and after his reinstatement, to which the veteran has himself subscribed, may not be disregarded either by him or by his employer. Not to discharge the veteran would have meant that the employing company must break its contract with the union and run the risk of disrupting its labor relations and of a possible strike. The discharge was not unreasonable under these circumstances.

Seniority Rights. Adverse Union Agreement During Veteran's Absence. A recent decision of the Ninth Circuit Court of Appeals [15] dealt with an important

[13] *In re National Maritime Union* (78 NLRB No. 137, August 17, 1948).

[14] *Kemp* v. *John Chatillon & Sons, Inc.*, (U. S. C. C. A. (3d), July 6, 1948).

[15] *Aeronautical Industrial District Lodge* v. *Campbell* (U. S. C. C. A. (9th), July 26, 1948).

question involving seniority rights arising under the veterans' reemployment statutes. Before the veteran's induction, an agreement between his employer and a union provided that lay-offs were to be made on a basis of straight seniority or length of service. During the veteran's absence in the service, the contract was modified so as to give union chairmen top seniority in lay-offs. Under this provision, which continued in effect after the veteran was reinstated, he was laid off within 1 year of his reinstatement because of lack of work, while union chairmen with shorter length of service continued in active employment.

In an action by the veteran for damages, the circuit court, affirming the judgment of the district court, ruled in favor of the veteran. It expressly disagreed with the Third Circuit Court of Appeals, which, in a case [16] raising the same question, had held by a 2 to 1 decision that a veteran may be adversely affected by a union agreement changing seniority rules, although the agreement was made in his absence, provided that the agreement is not arbitrary nor discriminatory. The third circuit majority opinion pointed out that the Supreme Court had held [17] veterans were not entitled to superseniority, but only to the same seniority they would have had if they had not entered the service. If they had continued to work, it was held, they would have been affected by the subsequent union agreement giving top seniority to union officials.

The ninth circuit court, however, adopted the views of the third circuit dissenting opinion, which stated that it was futile to speculate on what seniority the veteran would have had if he had not entered the service, and that the Supreme Court, while denying superseniority, referred to veterans' restored reemployment rights as "extraordinary statutory security," which could not be altered adversely even by a collective-bargaining agreement.

Decisions of State Courts

California—Refusal To Cross Picket Line. An employer sought an injunction in a lower State court [18] requiring a union to abide by a collective-bargaining agreement which the employer alleged had been breached by the union. The collective agreement prohibited strikes during the life of the agreement, but expressly provided that it should not be applicable to plant guards. During the contract term, an organization of the plant guards employed in the enterprise set up a picket line. Thereafter, several hundred members of the contracting union remained away from work, the union conceding that one reason for such stoppage was the fact that its members refused to cross the picket line. The union contended, however, that this refusal to work was not a breach of the contract, because an implied term of such an agreement is that refusal to cross a picket line is permitted. The court refused to read any such implication into the agreement and held that the work stoppage constituted a breach in violation of the contract which justified the granting of a preliminary injunction.

Pennsylvania—Injunction Against Union Coercion. An appellate State court held [19] that picketing to compel an employer to force his employees to join a union is picketing for an unlawful object and may be restrained by injunction. The Pennsylvania anti-injunction act prohibits the issuance of injunctions in labor disputes, but also provides that the prohibition shall not apply when a majority of the employees are nonunion and when a union engages in conduct having the effect of compelling an employer to violate the State labor relations act. The latter statute specifically guarantees employees the right not to join a union, and makes it an unfair labor practice for an employer to interfere with, restrain, or coerce employees in the exercise of this right. In the instant case, the majority of the employees were not members of the union. The union picketed to compel the employer either to force his employees to join the union or to discharge them and hire union members in their places. The picketing, therefore, was for an unlawful purpose and was clearly outside the protection of the State anti-injunction act, the court held, and thus justified the use of its general equity powers to restrain the unlawful conduct by issuing an injunction against it.

[16] *Gauweiler* v. *Elastic Stop Nut Corp.* (162 F. (2d) 448).

[17] *Fishgold* v. *Sullivan Drydock & Repair Corp.* (328 U. S. 275); *Trailmobile Co.* v. *Whirls* (331 U. S. 40).

[18] *Fruehauf Trailer Co.* v. *International Union, U. A. W.* (Calif. Super. Ct., L. A. County, July 29, 1948).

[19] *Wilbank* v. *Chester Hotel Union* (Pa. Supreme Ct., E. D., July 6, 1948).

Chronology of Recent Labor Events

August 16, 1948

THE UNITED STATES CIRCUIT COURT of Appeals, in Cincinnati, in a case involving the Foreman's Association of America and the Edward G. Budd Manufacturing Co., upheld the provision of the LMRA of 1947 which removes statutory protection from supervisors. The effect was held to be that employers are free to discharge supervisors for joining unions and to interfere with their union activities. The United States Supreme Court had returned the case (*National Labor Relations Board* v. *Budd*) to the lower court for reconsideration of a decision given under the previous act. (Source: Labor Relations Reporter, 22 LRRM, p. 2414.)

August 17

THE NLRB unanimously ruled, in a precedent decision, that the National Maritime Union of America (CIO) and seven of its officials violated the LMRA of 1947 (sections 8b (2) and (3)), by insisting that the Texas Co. and three other Great Lakes oil tanker firms sign agreements for continuation of hiring-hall practices and by striking in support of their demands (see Chron. item for June 3, 1948, in MLR, July 1948; also Hiring Halls under Taft-Hartley Act, p. 409 of this issue). (Source: NLRB release, R–118, Aug. 19, 1948.)

MEMBERS OF THE Textile Workers Union of America (CIO) totaling 15,000 in the New York Metropolitan area reached a 2-year agreement with 300 employers in the textile dyeing and finishing industry, thereby averting a scheduled strike. The settlement included a general wage increase of 12 cents an hour and certain fringe payments. The agreement extends to September 30, 1950, and provides for a wage reopening. (Source: CIO News. August 23, 1948.)

August 18

THE NATIONAL MARITIME UNION—one of 3 CIO unions enjoined from striking on the Atlantic and Gulf Coasts—reached a settlement for 60,000 members based on the Seafarers' International Union (AFL) contract of August 13, thereby retaining hiring-hall provisions pending final court adjudication, and winning similar wage increases for most ratings (see Chron. item for Aug. 13, 1948, in MLR, Sept. 1948.) On August 25, the National Marine Engineers' Beneficial Association won a 6-percent wage increase and other benefits and retained its hiring practices. On August 27, the American Radio Association won a 6-percent rise for 1,400 officers. (Source: BLS monthly Report on Current Wage Developments, Sept. 1, 1948, p. 39; NMU Pilot, Aug. 20, 1948; New York Times, Aug. 19, 26, 27, 28, 1948.)

August 21

HOURLY WAGE INCREASES of 5 to 24 cents, affecting 2,700 atomic plant workers of the Carbide and Carbon Chemicals Corp., Oak Ridge, Tenn., were approved by Local 228, United Gas, Coke, and Chemical Workers of America (CIO), under the wage reopening provision of a contract expiring June 9, 1949. (Source: New York Times, Aug. 22, 1948.)

On August 24, an unauthorized 7-day walk-out of some 3,300 AFL construction and maintenance workers at the Los Alamos (N. Mex.) atomic energy project was settled by agreement that the men were to return to work without being discriminated against (see also MLR, Sept. 1948, p. 288). (Source: New York Times, Aug. 24, 1948.)

On September 3, the President appointed a special commission to study the adequacy of collective bargaining methods and the entire problem of labor relations in Government-owned, privately operated atomic energy installations, and to make recommendations. Members appointed: William H. Davis (chairman), Aaron Horvitz, and Edwin E. Witte. (Source: White House release, Sept. 3, 1948; Cong. Record, June 18, 1948, p. 9091.)

THE FEDERAL COURT in New York, following the appointment and report of a Presidential board of inquiry, temporarily restrained the International Longshoremen's Association (AFL) from striking against East Coast companies. On August 24, it further enjoined the union's 45,000 members from striking for an 80-day period. (Source: Federal Register, Vol. 13, p. 4779; Labor Relations Reporter, 22 LRRM, p. 2421; and New York Times, Aug. 25, 1948. For issues in dispute, see MLR, Sept. 1948, p. 289.)

August 22

THE NLRB, in a precedent decision, in the case of the Midland Building Co., Kansas City, Mo., declined to assert jurisdiction over the maintenance employees of a general office building occupied partly by the clerical staffs of companies engaged in interstate commerce. The case arose out of a request for a decertification election. (Source: NLRB release R–117, Aug. 23, 1948.)

August 24

GENERAL MOTORS CORP. announced a 3-cent-an-hour quarterly cost-of-living wage increase for 265,000 hourly rated employees beginning September 1, under recent union agreements made with the United Auto Workers (CIO) and United Electrical Workers (CIO) (see MLR, July 1948, p. 1). In addition, 68,000 salaried employees of the company were to receive $25 extra in September, under a somewhat different formula. (Source: NewYork Times, Aug. 24, 1948.)

August 31

THE NEW JERSEY CHANCERY COURT held the Brewers Union Local No. 2, an affiliate of the International Union of United Brewery, Flour, Cereal, Soft Drink, and Distillery Workers of America (CIO), had the right, by will of its membership, to withdraw from the parent organization, regardless of its motives, and dismissed a preliminary injunction against the local. (Source: Labor Relations Reporter, 22 LRRM, p. 2453.)

September 1

THE UNITED AUTO WORKERS (CIO) ended a 16-day strike of 24,000 workers in seven plants of the International Harvester Co. called over terms for a new agreement. The settlement provided for individual plant contracts instead of a single company contract, as formerly. Issues were working conditions, about 60,000 members of various unions having obtained an 11-cent hourly wage increase on June 24. (For further details, see MLR, Sept. 1948, p. 287.) (Source: CIO News, Sept. 6, 1948.)

THE UNITED MINE WORKERS OF AMERICA (Ind.) announced that payment of pensions of $100 a month to eligible bituminous-coal miners and to anthracite miners would begin during September 1948, under the two health and welfare funds established by collective agreement (see Chron. item for June 25, 1948, in MLR, Aug. 1948). On September 9, payment was begun to bituminous-coal miners. (Source: United Mine Workers Journal, Sept. 1 (p. 3) and 15 (p. 3), 1948.)

THE NLRB, in the case of the Retail Clerks International Association (AFL) and Times Square Stores Corp., New York City, unanimously ruled that striking employees who had been replaced in a strike situation not caused by the employer's unfair labor practices were not eligible to vote in collective bargaining elections, under section 9 (c) (3) of LMRA of 1947, but that permanent replacements were eligible. The Board refused to review the strike, holding that it lacked power to "review the General Counsel's administrative dismissals of unfair labor practice charges, regardless of the grounds for his action." The decision arose out of a representation election of July 2, in which Local 830, Retail, Wholesale, and Department Store Union (CIO), representing the employees in the past, was ineligible to appear on the ballot because of noncompliance with the affidavit and registration requirements of the act. (Source: NLRB Release R-121, Sept. 1, 1948.)

September 2

THE NLRB ruled 3 to 2, in the case of Lane-Wells Co., Los Angeles, and the Oil Workers International Union (CIO), that a parent union may represent a local's employees as sole bargaining agent if both the international and local are in compliance with LMRA of 1947 as to affidavit and filing requirements. The Board found that both had been in compliance originally (see Chron. item for June 8, 1948, in MLR, July 1948) and rescinded its order of June dismissing the international's petition for an election. (Source: NLRB release, R-120, Sept. 2, 1948.)

THE PRESIDENT RELEASED the Federal Security Administrator's report on a 10-year national health program, which he had requested in January 1948 (see Chron. item of May 1, 1948, in MLR, June 1948). National compulsory health insurance was among the 9 major recommendations. (Source: New York Times, Sept. 3, 1948, and The Nation's Health—A Ten-Year Program, Federal Security Agency, 1948.)

SOME 28,000 workers of 5 maritime unions struck against West Coast ship owners and stevedoring companies on expiration of the 80-day anti-strike injunction imposed under the LMRA of 1947. The International Longshoremen and Warehousemen's Union (CIO) refused to accept the controversial hiring-hall provision yielded by employers if subject to final court approval, as stipulated in recent East Coast agreements (see also p. 394 of this issue). (Source: New York Times, Sept. 3, 4, 1948.)

September 3

THE NLRB RULED UNANIMOUSLY, in the case of Chrysler Corp. and Local 114 of the newly formed United Plant Guard Workers of America (Ind.), that a union previously affiliated with a labor federation admitting nonguards, but which had disaffiliated, was qualified to represent guards under LMRA of 1947 (section 9 (b) (3)). Accordingly, the Board ordered its first representation election of this type among 600 plant protection employees in the Chrysler Detroit plants. (Source: NLRB release R-123, Sept. 8, 1948, and Labor Relations Reporter, Analysis, p. 77, and 22 LRRM, p. 1394.)

September 8

THE Michigan Supreme Court, in *Local 170, Transport Workers Union of America (CIO)* v. *Gadola*, declared the Michigan Labor Mediation (Bonine-Tripp) Act unconstitutional, so far as it required compulsory arbitration of labor disputes in public utilities, with a circuit judge as chairman in such proceedings. (Source: Labor Relations Reporter, 22 LRRM, p. 2460.)

September 10

MEMBERS OF LODGE 751, International Association of Machinists (Ind.), voted to end its 20-week strike against the Boeing Airplane Co., Seattle, on terms proposed in the NLRB trial examiner's report of July 24, which recommended that all strikers be reinstated without loss of seniority or former rights.

On April 22, the strike involving nearly 15,000 production and maintenance employees had started (for discussion, see MLR, Aug. 1948, p. 152, MLR, Sept. 1948, p. 300 (*Graham* v. *Boeing*), and p. 396 of this issue). (Source: Labor, Sept. 18, 1948, and NLRB release R-109, July 25, 1948.)

Publications of Labor Interest

Special Reviews

Effective Labor Arbitration: The Impartial Chairmanship of the Full-Fashioned Hosiery Industry. By Thomas Kennedy. Philadelphia, University of Pennsylvania, Wharton School of Finance and Commerce, Industrial Research Department, 1948. 286 pp., bibliography. (Research Study XXXIV.) $3.50, University of Pennsylvania Press.

Arbitration as the terminal point in grievance procedures was recommended by both labor and management representatives at the President's National Labor-Management Conference of 1945. It was recognized that unless satisfactory terminal points for grievance procedures are developed, industrial peace may be marred by stoppages, and efficiency in production may be hindered by the festering of grievances and the challenging of management's claim to administrative initiative.

Can arbitration prevent these consequences? Can industrial peace be preserved with satisfaction to both labor and management? Can arbitration be effective in a partially unionized, competitive industry with association-wide collective bargaining and a piece-rate wage system? These questions are answered affirmatively in this book, which describes and evaluates the procedures, techniques, and principles of the permanent arbitration system established in 1929 in the unionized section of the hosiery industry, an industry in which strikes and stoppages have been virtually eliminated.

The arbitration system—the impartial chairmanship—is a mediation and arbitration system voluntarily established and maintained by the employers' association and the American Federation of Hosiery Workers as a part of their national labor agreement. Under this system, the parties agree to submit all problems which arise during the life of the contract, and which they cannot settle by negotiation, to the permanent impartial chairman for final and binding settlement (except for requests for changes in the general wage level). The impartial chairman interprets and applies the agreement, and at times makes new rules to govern conditions not covered by its provisions.

In rendering decisions on the various problems presented to him, the impartial chairman creates a system of industrial common law which constitutes "a body of accepted principles which now serve as precedents" and which guide the parties in their day-to-day negotiations. Basic to this industrial code, according to the author, who has served as impartial chairman, is the establishment and protection of employees' rights by methods which maintain and strengthen, rather than weaken, the powers which management requires for efficiency of operations. As a result, this body of common law has lent stability to the bargaining system and has made uninterrupted production possible; has released union and management officials for more productive work; and has improved employee morale and fostered willingness to cooperate with management, individually and through the union, in the introduction of new equipment and techniques.—A. W.

Work and Effort: The Psychology of Production. By Thomas Arthur Ryan. New York, Ronald Press Co., 1947. 323 pp., charts. $4.50.

The book with this intriguing title actually is a systematic survey of investigations in the field of applied industrial psychology. The field which the author has staked out within this concept covers a considerable variety of items: metabolism and muscle fatigue, fatigue in sedentary work, productivity, work methods and efficiency, incentives and motivations, boredom, time standards and rate setting, merit rating and job evaluations, accident proneness, and skill and practice. Aside from bringing together data in these fields, the writer makes his own contribution in his critical examination of the work that has been done in each of the areas, and in his objective evaluation of results and shortcomings.

The text is intended primarily as an orientation for future work by psychologists. As the author points out again and again, most of the work done in this field has been conducted in laboratories and consequently has suffered from failure to take into account the many other factors affecting a worker's performance on the job.

The author's solution for this situation is contained in his last sentence: "Once more we come back to our much repeated point that industry cannot expect decisive aid from psychology until it actively maintains research programs directed toward the solution of its particular problems, not only its immediate, everyday problems, but also the broad fundamental questions which underlie them."

The difficulty with this approach, however, is that the problem is caught on both horns of a dilemma. Obviously the best answer to the inadequacy of laboratory experiments is to conduct experiments in the workplace itself. This, however, would require that an employer manipulate his work arrangements (rest pauses, shift rotations, wage incentives, hours and work schedules, and the many other factors to be studied) so as to suit the needs of the experimental psychologist.

On the other hand, for experiments of this type to be successful, it is necessary that the work force be unaware

EDITOR'S NOTE.—Correspondence regarding the publications to which reference is made in this list should be addressed to the respective publishing agencies mentioned. Where data on prices were readily available, they have been shown with the title entries.

that its performance is being studied. This was dramatically illustrated by the famous Hawthorne study, in which a small number of workers were studied over a long period of time in order to determine the effects of various types of working conditions. The experiment misfired because the workers knew that they were being studied and they made it a point to keep up their production regardless of the improvement or worsening of their working conditions. The conclusion arrived at in the study was that motivation was more important than working conditions—a conclusion which may be open to question.

It would seem that applied psychology will have to continue to be what it is—a pioneering effort which may indicate to management various factors to be taken into account, and some possible leads, but no conclusive answers.

—M. D. K.

Absenteeism

Absenteeism and Injury Experience of Older Workers. By Max D. Kossoris. Washington, U. S. Bureau of Labor Statistics, 1948. 4 pp., charts. (Serial No. R. 1928; reprinted from Monthly Labor Review, July 1948.) Free.

Illness Absenteeism in Manufacturing Plants in 1947. By Max D. Kossoris. Washington, U. S. Bureau of Labor Statistics, 1948. 3 pp. (Serial No. R. 1919; reprinted from Monthly Labor Review, March 1948.) Free.

Agricultural Workers

Agricultural Workers Under National Labor Relations Laws. By Fred Witney. Urbana, University of Illinois, Institute of Labor and Industrial Relations, 1948. 32 pp. (Publications Series A, Vol. 2, Special.) 5 cents.

The Hired Farm Working Force of 1947. Washington, U. S. Department of Agriculture, Bureau of Agricultural Economics, 1948. 16 pp.; processed.

Results of a sample survey, with comparisons from a similar survey for 1945. These surveys supplement the monthly employment series and quarterly wage series. This report includes information on such matters as time worked and cash wages earned at farm work and the composition of the hired farm working force. It is shown, for example, that only 36 percent of the farm wage workers were restricted to hired farm work, the other 64 percent comprising farm operators, workers engaged mainly or partly at nonfarm work, and students or others not ordinarily in the labor force.

Trends in the Tenure Status of Farm Workers in the United States Since 1880. By Carl C. Taylor, Louis J. Ducoff, Margaret J. Hagood. Washington, U. S. Department of Agriculture, Bureau of Agricultural Economics, 1948. 36 pp.; processed.

Child and Youth Employment

The Case for Sixteen Year Employment Laws. New York, National Child Labor Committee, 1948. 8 pp., map. (Pamphlet No. 392.) Rev. ed.

A Guide to Child-Labor Provisions of the Fair Labor Standards Act (The Federal Wage and Hour Law). Washington, U. S. Department of Labor, Wage and Hour and Public Contracts Divisions, Child Labor Branch, 1948. 15 pp. (Child-Labor Bull. No. 101.) Free.

International Labor Conference, 31st Session, San Francisco, 1948: Report of the Governing Body of the International Labor Office Upon the Working of the Convention (No. 6) Concerning the Night Work of Young Persons Employed in Industry (1919). Geneva, International Labor Office, 1948. 24 pp. 25 cents. Distributed in United States by Washington Branch of ILO.

Supplementary Investigation of the Logging and Sawmilling Industries: A Report on Occupational Hazards to Young Workers. Washington, U. S. Department of Labor, Wage and Hour and Public Contracts Divisions, Child Labor Branch, 1948. 39 pp.; processed. (No. 4–C.) Free.

The investigation served as a basis for revising and extending the coverage of Hazardous Occupations Order No. 4, issued under the child-labor provisions of the Fair Labor Standards Act. Text of the revised order is given in an appendix.

Youth Enters the Labor Market. (*In* Employment Service Review, U. S. Department of Labor, Employment Service, Washington, May 1948, pp. 3–40, bibliography, illus. 15 cents, Superintendent of Documents, Washington.)

Symposium on various subjects pertinent to the employment of young persons.

Cost and Standards of Living

Expenditures of Moderate-Income Families: 1934–36 and 1945. Washington, U. S. Bureau of Labor Statistics, 1948. 5 pp. (Serial No. R. 1926; reprinted from Monthly Labor Review, June 1948.) Free.

How Families Use Their Incomes. Washington, U. S. Department of Agriculture, 1948. 64 pp., charts. (Miscellaneous Pub. No. 653.) 30 cents, Superintendent of Documents, Washington.

Largely a graphic presentation of types and trends of family expenditures, with considerable tabular data. Farm and nonfarm conditions are compared.

Workers' Budgets in the United States: City Families and Single Persons, 1946 and 1947. Washington, U. S. Bureau of Labor Statistics, 1948. 55 pp., chart. (Bull. No. 927; reprinted from Monthly Labor Review, February 1948, with additional data.) 25 cents, Superintendent of Documents, Washington.

Income and Living Costs in Alaska in 1943–45, Including a Report of Housing Characteristics of Privately-Financed Dwellings in Juneau, Fairbanks, and Anchorage. By Pauline B. Paro. Washington, U. S. Bureau of Labor Statistics, 1948. 112 pp., charts; processed. Free.

El Subconsumo en América del Sur—Alimentos, Vestuario y Vivienda. By Moisés Poblete Troncoso. Santiago, Chile, Editorial Nascimento, 1946. 428 pp., bibliography.

Documented study of consumption habits and the standard of living in South America.

Economic and Social Problems

Alternative to Serfdom. By John Maurice Clark. New York, Alfred A. Knopf, 1948. 153 pp. $3.

Five lectures at University of Michigan, March 1947. The lectures deal with old problems such as freedom and responsibility, the role of the market, and the functions of political and economic agencies—problems described by the author as now assuming new forms and fresh urgency. In the labor field, there are discussions of "labor's rise to power," the problems of wage determination, and the role of wages in the flow of income and the maintenance of adequate levels of employment and economic activity. Group organization is viewed as an inevitable and necessary protection for the common man: his alternative to serfdom. In general, the author deplores dependence on any automatic mechanism such as the competitive market or any ready-made formula such as that of the Keynesian doctrine. Our economy depends, he states, on its ability to command willing cooperation; and political democracy must be achieved and continually earned or it ceases to have reality.

Mechanization Takes Command—A Contribution to Anonymous History. By Siegfried Giedion. New York, Oxford University Press, 1948. 743 pp., diagrams, illus. $12.50.

A study of the evolution of mechanization, primarily for the purpose of understanding its effects on the human being. The author believes that the changes he describes have split our modes of thinking from our modes of feeling. Mechanization, he states, has been misused to exploit both earth and man, with complete irresponsibility, and he argues for a new point of view which would subordinate technology to human needs and reinstate basic human values. The volume, although philosophical in approach and outlook, is a detailed and elaborately illustrated study of technological changes, especially those most intimately affecting modes of everyday living and the nature of the surroundings of human beings in their homes. Special attention is given to mechanization in the United States, where, the author states, it is inextricably woven into the pattern of thought and customs.

Modern Economics. By A. E. Burns, A. C. Neal, D. S. Watson. New York, Harcourt, Brace & Co., 1948. 954 pp., bibliography, charts. $5.

In this new introductory text, the authors take advantage of the expository possibilities of a national income approach to present a broad factual and theoretical coverage of the main outlines of the study of economics on an elementary level. An effort is made to reflect the changes in the general approach and body of economic thought resulting from the impact of Keynes; and a national income approach is readily adapted to the new emphasis on aggregative analysis and consumption-savings-investment relationships. One curious consequence is that the business cycle receives less rather than more attention than one would expect in a modern text of this scope.

Education and Training

Digest of Annual Reports of State Boards for Vocational Education to the Office of Education, Division of Vocational Education, fiscal year ended June 30, 1947. Washington, Federal Security Agency, Office of Education, Division of Vocational Education, 1948. 70 pp., charts; processed.

National Apprenticeship Standards for the Photo-Engraving Industry. Washington, U. S. Department of Labor, Bureau of Apprenticeship, 1948. [17 pp.] Free.

Formulated by American Newspaper Publishers Association and the International Photo-Engravers' Union of North America in cooperation with the Bureau of Apprenticeship of the U. S. Department of Labor.

National Standards of Apprenticeship for Terrazo Workers. Washington, U. S. Department of Labor, Bureau of Apprenticeship, 1948. [15 pp.] Free.

Formulated by National Terrazo and Mosaic Association, Inc., and Bricklayers, Masons and Plasterers International Union of America in cooperation with the Bureau of Apprenticeship.

Testing and Counseling in the High-School Guidance Program. By John G. Darley. Chicago, Science Research Associates, 1947. 222 pp., bibliographies, charts. $2.95.

General survey of the problems of the high-school counselor, including outlines and explanations of standard achievement tests and suggestions for wider and more adequate counseling programs.

Proceedings of the Second Annual Training Conference of Educational Directors in Industry and Commerce, May 6–7, 1948, Montreal, Quebec. Montreal, Canadian Industrial Trainers' Association, 1948. 126 pp.; processed.

Vocational Guidance in Poland. By Seweryn Hartman. (*In* International Labor Review, Geneva, June 1948, pp. 591–602. 50 cents. Distributed in United States by Washington Branch of ILO.)

Guaranteed Wage

The Guaranteed Annual Wage. By Alexander Calder and James L. Knipe. Washington, National Planning Association, 1948. 38 pp. (Planning Pamphlet No. 63.) 50 cents.

Discussion of possible economic consequences of a very rapid spread of annual wage plans throughout industry. The increased wage bill resulting from general adoption of the guaranteed annual wage, the authors state, might be slightly offset by tax reduction and increased productivity but would be borne mainly by consumers. Perhaps more important, "there might be such decrease in labor mobility as to retard seriously the great long-range developments leading to permanently higher standards of living." For rapidly fluctuating sectors of industry, the authors conclude that "perhaps it is better to rely on other techniques to improve worker income stability." To date, the limited experience in the steadier sectors of industry "indicates that the guaranteed annual wage has real possibilities, and deserves careful consideration by top management."

Guaranteed Wage Plans in the United States: A Report on the Extent and Nature of Guarantee Plans and the Experience of Selected Companies. Washington, U. S. Bureau of Labor Statistics, 1948. 90 pp. (Bull. No. 925.) 35 cents, Superintendent of Documents, Washington.

Contains a section on experience with 62 selected guarantee plans, and an appendix on the basic data studied.

Guaranteeing Security for the Worker. By Jules Backman and Joseph Keiper. (*In* Dun's Review, New York, June 1948, pp. 20-22, et seq.)

Brief examination of the economic characteristics of the industries which include the "big three" (George A. Hormel & Co., Procter & Gamble Co., and Nunn-Bush Co.) guaranteed wage plans, and of the individual firms themselves, as an aid toward understanding the type of economic environment in which such plans have had their greatest success.

Proposals for Coordinating Guaranteed Annual Wages and Unemployment Insurance. Washington, Federal Security Agency, Social Security Administration, Bureau of Employment Security, 1948. 18 pp.; processed. (Attachment to Unemployment Compensation Program Letter No. 136, Sup. 1.)

Analysis of recommendations for coordinating unemployment insurance and guaranteed wages, made by the Advisory Board of the Office of War Mobilization and Reconversion in its report on guaranteed wages, with discussion of present and possible relationships.

Guaranteed Wages: Increased Security Over Wide Field. (*In* Labor and Industry in Britain, British Information Services, New York, etc., June 1948, pp. 82–84.)

Reviews provisions made in collective-bargaining agreements in Great Britain, since World War II, for the guaranteed week in a wide range of industries. A tabulation shows extent of the guaranty, by industry.

Industrial Hygiene

Industrial Medicine and Hygiene. Abstracts of proceedings of industrial health meetings, Boston, March 2 to April 4, 1948. Reported by C. O. Sappington M.D. (*In* Industrial Medicine, Chicago, June 194 pp. 225–232, illus. 75 cents.)

Medical Problems Encountered in the Manufacture American-Made Rubber. By R. H. Wilson, M.D G. V. Hough, M.D., W. E. McCormick. (*In* I dustrial Medicine, Chicago, June 1948, pp. 199–20 bibliography. 75 cents.)

Deals with the principal ingredients of the butadien type of rubber, their toxic effects on workers, medic treatment in the plant, and control of hazards.

Methyl Bromide Poisoning—Review of the Literature. B Ludwig Teleky, M.D. (*In* Monthly Review, Division of Industrial Hygiene and Safety Standards NewYork State Department of Labor, New York June 1948, pp. 21–24, bibliography.)

Therapeutic and Industrial Uses of Music—A Review the Literature. By Doris Soibelman. New York Columbia University Press, 1948. 274 pp., bibliography. $3.

The Natural Lighting of Industrial Buildings. [Melbourne?], Australia, Department of Labor and National Service, Industrial Welfare Division, 1948 83 pp., bibliography, diagrams, illus. (Bull. No. 11.) 2s.

Industrial Relations

Attitude Prediction in Labor Relations—A Test of "Understanding." By Lester M. Libo. Stanford, Calif., Stanford University, Division of Industrial Relations, [1948?]. 18 pp., bibliography. (Studies in Industrial Relations, No. 10.)

Benefit Plan Provisions of Collective Agreements and Federal and State Social Security Laws. (*In* Bulletin of the Metal Trades Department, American Federation of Labor, Washington, May 1948, pp. 1–8.)

Collective Bargaining: Lawyers' Role in Negotiations and Arbitrations. By W. Willard Wirtz. (*In* American Bar Association Journal, Chicago, July 1948, pp. 547–552. 75 cents.)

Collective Bargaining Provisions: Apprentices and Learners. Washington, U. S. Bureau of Labor Statistics, 1948. 44 pp. (Bull. No. 908–4.) 15 cents, Superintendent of Documents, Washington.

Labor Relations in the Air Transport Industry Under the Amended Railway Labor Act. By E. B. McNatt. Urbana, University of Illinois, Institute of Aeronautics, 1948. 27 pp. (Aeronautics Bull. No. 3.)

Union Attitudes on the Application of Industrial Engineering Techniques to Collective Bargaining. By William Gomberg. (*In* Personnel, New York, May 1948, pp. 443–454. $1.)

dustrial Regulation in Australia: A Study of Awards, Method of Remuneration Fixation, and the Status of Trade Unions Under the Australian Regulative System. By Orwell de R. Foenander. Melbourne, University Press, 1947. 232 pp. 17s. 6d.

nadian Strike Trends. By J. I. Griffin. (*In* Public Affairs, Halifax, July 1948, pp. 184–189. 30 cents.)

ee also under Labor Management Relations Act, 1947.)

bor and Social Legislation

ate Labor Relations Acts—A Study of Public Policy. By Charles C. Killingsworth. Chicago, University of Chicago Press, 1948. 328 pp., bibliography. $4.

Outlines the background provided by Federal legislation up to and including the National Labor Relations Act of 1935, and analyzes the various State labor relations acts which followed.

e Good Faith Clauses of the Portal-to-Portal Act: An Attempt to Introduce Certainty in the Field of Administrative Law. By William S. Tyson. (*In* Temple Law Quarterly, Philadelphia, July 1948, pp. 1–11; also reprinted.)

Working Time" and the Portal-to-Portal Act of 1947. By Johanna M. D'Amico. (*In* Federal Bar Journal, Washington, July 1948, pp. 375–390. 75 cents.)

e Constitutions of the Americas (as of January 1, 1948). Edited by Russell H. Fitzgibbon and others. Chicago, University of Chicago Press, 1948. 847 pp. (In English.) $10.

Statement of the Laws of Brazil in Matters Affecting Business in its Various Aspects and Activities. Washington, Inter-American Development Commission, 1948. 116 pp.; processed. $10.

Includes an 18-page summary of labor and social legislation.

ee also under Labor Management Relations Act, 1947.)

abor Management Relations Act, 1947

e Labor Management Relations Act of 1947: A Topical Digest. By Richard Powers. (*In* Southern Economic Journal, Chapel Hill, N. C., July 1948, pp. 67–79. $1.)

ollective Bargaining and the Taft-Hartley Act. By Walter L. Daykin. (*In* Iowa Law Review, Iowa City, May 1948, pp. 623–652. $1.)

ollective Bargaining Under the Taft-Hartley Act. By Beryl Harold Levy. (*In* Harvard Business Review, Boston, Mass., July 1948, pp. 468–479. $1.50.)

ollective Bargaining, Public Policy, and the National Labor Relations Act of 1947. By Donald H. Wollett. (*In* Washington Law Review and State Bar Journal, Seattle, August 1948, pp. 205–234. 50 cents.)

The Labor Management Relations Act and the Rivival of the Labor Injunction. (*In* Columbia Law Review, New York, July 1948, pp. 759–772. $1.)

Labor Under the Taft-Hartley Act. By Julie Meyer. (*In* Social Research, New York, June 1948, pp. 194–210. $1.)

The "New" National Labor Relations Act in Operation: First Eight Months. By William B. Lockhart. (*In* Minnesota Law Review, Minneapolis, June 1948, pp. 663–733. $1.)

The Periodical Press and the Taft-Hartley Act. By Philip Ash. (*In* Public Opinion Quarterly, Princeton, N. J., Summer 1948, pp. 266–271. $1.50.)

Results of an analysis of attitudes concerning the Labor-Management Relations (Taft-Hartley) Act, 1947, as reflected by items in 50 periodicals.

The Taft-Hartley Act in Action. By Thomas R. Mulroy. (*In* University of Chicago Law Review, Vol. 15, No. 3, Chicago, Spring 1948, pp. 595–637. $1.)

Labor Organizations and Activities

The Building Service Story. By James J. Bambrick. New York, Labor History Press, 1948. 90 pp., charts. $1.

The story of New York's local 32–B of the Building Service Employees' International Union (AFL) from the time of its organization in 1934, as told by its founder and president for seven years.

The Canadian Labor Press from 1867: A Chronological Annotated Directory. By Robbins L. Elliott. (*In* Canadian Journal of Economics and Political Science, Toronto, May 1948, pp. 220–245; also reprinted.)

Registered Trade Unions in India, 1945–46. (*In* Indian Labor Gazette, Ministry of Labor, Delhi, January 1948, pp. 442–447.)

In addition to the more detailed data for 1945–46, the article shows the growth of registered trade-unions in British India, by year, 1927–28 to 1945–46. During this period, women members increased from 1.2 to 4.5 percent of the total.

Minority Groups

Compilation of Laws Against Discrimination Because of Race, Creed, Color, or National Origin. New York, Executive Department, State Commission Against Discrimination, 1948. 172 pp.

New York State Law Against Discrimination. By Caroline K. Simon. (*In* Women Lawyers Journal, Vol. XXXIII, No. 1, New York, Spring 1947, pp. 51–56. 25 cents.)

The background and operation of New York's antidiscrimination law are described by a member of the State Commission Against Discrimination.

Discrimination in Employment: Report of Activities of Bureau on Jewish Employment Problems, July 1947. Chicago, Bureau on Jewish Employment Problems, 1947. 26 pp., charts, illus.; processed.

Integrating the Negro Worker into Factories and Offices. By J. J. Morrow. (*In* Service, Tuskegee, Ala., March 1948, pp. 23, 32. 25 cents.)

Address by the personnel manager of a Connecticut firm relating the experience of his own company in the employment of qualified Negro workers.

Old Age Pensions and Assistance

Old Age and Survivors' Insurance and Old Age Assistance in the South. By E. J. Eberling. (*In* Southern Economic Journal, Chapel Hill, N. C., July 1948, pp. 54–66, chart. $1.)

Pension Planning Fundamentals. New York, Central Hanover Bank and Trust Co., 1948. 44 pp.

Recent Amendments to the [Federal] Civil Service Retirement Act. By Robert J. Myers. (*In* Social Security Bulletin, Federal Security Agency, Social Security Administration, Washington, April 1948, pp. 9–17. 20 cents, Superintendent of Documents, Washington.

Discussion and evaluation of recent changes in the Act.

Retirement System for Municipal Employees in Cities of Washington State. Compiled by Donald C. Sampson. Seattle, University of Washington, Bureau of Governmental Research and Services, 1948. 21 pp.; processed. (Report No. 73.)

Personnel and Industrial Management

An Approach to Management. By G. E. Milward. Cambridge, Mass., Harvard University Press, 1947. 82 pp., bibliography. $1.50.

The author, who organized the Management Library in London, states that the economic period we are now entering may well be one of "organized cooperation" in which management assumes the broader meanings which he attempts to develop—"broader than the old conception of authority maintained by strict discipline." He therefore emphasizes the human factor in management and the art of human sympathy and understanding.

Building Quality into Manpower. New York, American Management Association, 1948. 35 pp. (Production Series, No. 179.)

One of the three papers in the pamphlet is on "Use and results of attitude surveys."

Counseling Employees. By Earl M. Bowler and Frances Trigg Dawson. New York, Prentice-Hall, Inc., 1948. 247 pp., bibliographies. $4 ($3 to schools).

The writers deal with the development and advantages of counseling programs, describe how they function, and make suggestions for their successful operation.

Improved Foremanship. By Auren Uris. New Yor Macmillan Co., 1948. 280 pp. $3.50.

Principles of Personnel Testing. By Charles H. Lawsh Jr. New York, McGraw-Hill Book Co., Inc., 194 227 pp., charts. $3.50.

Wages and Hours of Labor

Clerical Salary Survey of Rates Paid, April 1948. Ne York, National Industrial Conference Board, Inc 1948. 18 pp. (Studies in Personnel Policy, No. 93

Third Annual Survey [of] Wage Rates, Office and Relate Occupations; Personnel Policies, Office Employees an Production Employees: Salt Lake City and Vicinit Salt Lake City, Industrial Relations Council of Uta 1948. 28 pp.

Union Wages and Hours: Local Transit Operating Em ployees, October 1, 1947. Washington, U. S. Bureau of Labor Statistics, 1948. (Bull. No. 933.) 1 cents, Superintendent of Documents, Washington.

Fair Wages Conditions in Dominion Government Contracts (*In* Labor Gazette, Department of Labor, Ottawa June 1948, pp. 623–625.)

Wage Rates, Hours, and Working Conditions in the Iron an its Products Industry, [Canada], October 1947. (I Labor Gazette, Department of Labor, Ottawa, Jul 1948, pp. 757–770.)

Deals with conditions in the production of crude, rolled and forged products; foundry and machine shop products and sheet metal products. Data for other branches of th iron industry will be given in subsequent articles.

Wage Rates, Hours, and Working Conditions in the Loggin Industry, [Canada], 1947. (*In* Labor Gazette Department of Labor, Ottawa, June 1948, pp. 635 639.)

General Reports

The Midyear Economic Report of the President to the Con gress, July 30, 1948, Together with a Report, The Economic Situation at Midyear 1948, by the Council o Economic Advisers. Washington, Government Printing Office, 1948. 115 pp., charts. 30 cents, Superintendent of Documents, Washington.

Prosperity Decade: A Chapter from American Economic History, 1917–1929. By George Soule. London Pilot Press Limited, 1947. 365 pp., bibliography, illus. 25s.

Much attention is given to such topics as labor unions, productivity, and the relative shares of income as affected by price and wage trends.

cond Report of the International Labor Organization to the United Nations. Geneva, International Labor Office, 1948. 138 pp. 75 cents. Distributed in United States by Washington Branch of ILO.

nemployment Benefits, Wages, and Living Costs, [1939–47]. By Joseph Schachter. (*In* Social Security Bulletin, Federal Security Agency, Social Security Administration, Washington, April 1948, pp. 3–9. 20 cents, Superintendent of Documents, Washington.)

France Économique de 1939 à 1946. (*In* Revue d'Économie Politique, Paris, September-October 1947, pp. 801–1192.)

Collection of reports reviewing various aspects of the rench economy between 1939 and 1946. Contains dissions of price trends and national income.

rench Reconstruction. By Elizabeth R. Cameron. New Haven, Conn., Yale Institute of International Studies, 1948. 24 pp.; processed.

Analysis of economic conditions and policies in postar France.

Economic Survey [of Great Britain] for 1948. London, 1948. 62 pp. (Cmd. 7344.) 1s. net, H. M. Stationery Office, London.

Second annual survey of the economic state of the nation, reviewing prospects and targets for 1948. Recapitulates objectives of the economic survey for 1947 and examines degree of fulfillment. The Prime Minister's "Statement on Personal Incomes, Costs, and Prices" (Cmd. 7321), presented to Parliament in February 1948, is reproduced in an appendix.

Guides to Official Sources: No. 1, Labor Statistics. London, Interdepartmental Committee on Social and Economic Research, 1948. 32 pp. 9d. net, H. M. Stationery Office, London.

Descriptions of the various statistical series issued by the British Ministry of Labor and National Service, and of the methods by which they are collected and compiled. Fields covered include employment, unemployment, wage rates, earnings, hours worked, industrial disputes, industrial accidents and diseases, prices, and family budgets. Specimen forms used are given in an appendix.

Current Labor Statistics

A.—Employment and Pay Rolls

B.—Labor Turn-Over

C.—Earnings and Hours

D—Prices and Cost of Living

E—Work Stoppages

F—Building and Construction

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A: Employment and Pay Rolls

TABLE A–1: Estimated Total Labor Force Classified by Employment Status, Hours Worked, and Se

Labor force	Estimated number of persons 14 years of age and over [1] (in thousands)												
	1948								1947				
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug
Total, both sexes													
Total labor force [2]	64,511	65,135	64,740	61,660	61,760	61,005	61,004	60,455	60,870	61,510	62,219	62,130	63,
Civilian labor force	63,186	63,842	63,479	60,422	60,524	59,769	59,778	59,214	59,590	60,216	60,892	60,784	61,
Unemployment	1,941	2,227	2,184	1,761	2,193	2,440	2,639	2,065	1,643	1,621	1,687	1,912	2,
Employment	61,245	61,615	61,296	58,660	58,330	57,329	57,139	57,149	57,947	58,595	59,204	58,872	59,
Nonagricultural	52,801	52,452	51,899	50,800	50,883	50,482	50,368	50,089	50,985	50,609	50,583	50,145	50,
Worked 35 hours or more	42,305	32,404	43,240	42,726	42,179	42,576	40,977	42,242	43,144	42,616	43,102	42,796	41,
Worked 15–34 hours	4,811	12,147	4,910	4,886	4,902	4,467	5,255	4,614	4,674	5,147	4,534	3,988	4,
Worked 1–14 hours [3]	1,447	1,394	1,403	1,637	1,776	1,644	1,798	1,513	1,631	1,470	1,391	1,312	1,
With a job but not at work [4]	4,239	6,508	2,348	1,550	2,027	1,753	2,338	1,721	1,534	1,376	1,556	2,050	3,
Agricultural	8,444	9,163	9,396	7,861	7,448	6,847	6,771	7,060	6,962	7,985	8,622	8,727	8,
Worked 35 hours or more	6,122	7,011	7,390	5,936	5,670	4,754	3,844	4,729	4,590	5,709	6,867	7,297	6,
Worked 15–34 hours	1,669	1,767	1,669	1,513	1,336	1,397	1,759	1,765	1,631	1,781	1,383	1,077	1,
Worked 1–14 hours [3]	249	203	182	201	187	265	386	250	320	298	204	165	
With a job but not at work [4]	405	184	154	211	255	431	782	315	421	198	167	187	
Males													
Total labor force [2]	46,525	46,715	46,039	44,519	44,589	44,228	44,236	44,071	44,156	44,426	44,754	44,881	45,
Civilian labor force	45,215	45,437	44,794	43,298	43,369	43,009	43,026	42,846	42,892	43,148	43,443	43,551	44,
Unemployment	1,326	1,448	1,375	1,239	1,567	1,765	1,889	1,574	1,239	1,176	1,183	1,393	1,
Employment	43,889	43,989	43,420	42,058	41,801	41,244	41,137	41,273	41,653	41,972	42,260	42,158	43,
Nonagricultural	36,836	36,633	36,162	35,386	35,352	35,063	35,046	35,018	35,484	35,323	35,340	35,202	35,
Worked 35 hours or more	31,226	24,344	31,700	31,006	30,575	30,649	29,592	30,719	31,147	31,020	31,476	31,232	30,
Worked 15–34 hours	2,599	7,766	2,535	2,565	2,525	2,390	2,800	2,414	2,411	2,709	2,212	2,094	2,
Worked 1–14 hours [3]	563	563	597	709	787	729	899	610	738	622	630	522	
With a job but not at work [4]	2,448	3,962	1,332	1,105	1,465	1,294	1,755	1,275	1,187	972	1,022	1,355	2,
Agricultural	7,053	7,356	7,257	6,673	6,450	6,181	6,091	6,254	6,169	6,649	6,920	6,955	7,
Worked 35 hours or more	5,663	6,152	6,310	5,525	5,321	4,548	3,698	4,505	4,376	5,236	5,913	6,175	6,
Worked 15–34 hours	882	903	707	862	816	1,035	1,375	1,255	1,177	1,638	736	523	
Worked 1–14 hours [3]	179	145	111	136	124	211	330	202	252	194	128	87	
With a job but not at work [4]	330	157	129	150	189	387	688	292	364	180	142	169	
Females													
Total labor force [2]	17,986	18,420	18,701	17,141	17,171	16,777	16,768	16,384	16,714	17,084	17,465	17,249	17,
Civilian labor force	17,971	18,405	18,685	17,124	17,155	16,760	16,752	16,368	16,698	17,068	17,449	17,233	17,
Unemployment	615	779	809	522	626	675	750	491	404	445	504	519	
Employment	17,356	17,626	17,876	16,602	16,529	16,085	16,002	15,876	16,294	16,623	16,944	16,714	16,
Nonagricultural	15,965	15,819	15,737	15,414	15,531	15,419	15,322	15,071	15,501	15,286	15,243	14,943	15,
Worked 35 hours or more	11,079	8,060	11,540	11,720	11,604	11,927	11,385	11,523	11,997	11,596	11,626	11,564	10,
Worked 15–34 hours	2,212	4,381	2,375	2,321	2,377	2,077	2,455	2,200	2,263	2,438	2,322	1,894	2,
Worked 1–14 hours [3]	884	831	806	928	989	955	899	903	893	848	761	790	
With a job but not at work [4]	1,791	2,546	1,016	445	562	459	583	446	347	404	534	695	1,
Agricultural	1,391	1,807	2,139	1,188	998	666	680	806	793	1,336	1,702	1,772	1,
Worked 35 hours or more	459	859	1,080	411	349	206	146	224	214	473	954	1,122	
Worked 15–34 hours	787	864	962	651	520	362	384	510	454	743	647	554	
Worked 1–14 hours [3]	70	58	71	65	63	54	56	48	68	104	76	78	
With a job but not at work [4]	75	27	25	61	66	44	94	23	57	18	25	18	

[1] Estimates are subject to sampling variation which may be large in cases where the quantities shown are relatively small. Therefore, the smaller estimates should be used with caution. All data exclude persons in institutions. Because of rounding, the individual figures do not necessarily add to group totals.

[2] Total labor force consists of the civilian labor force and the armed forces.

[3] Excludes persons engaged only in incidental unpaid family work (less th 15 hours); these persons are classified as not in the labor force.

[4] Includes persons who had a job or business, but who did not work duri the census week because of illness, bad weather, vacation, labor dispute, because of temporary lay-off with definite instructions to return to wo within 30 days of lay-off. Does not include unpaid family workers.

Source: U. S. Department of Commerce, Bureau of the Census.

NOTE.—Explanatory notes outlining briefly the concepts, methodology, size of the reporting sample, and sources used in preparing data presented in tables A–2 through A–14 are contained in the Bureau's monthly mimeographed release, "Employment and Pay Rolls—Detailed Report," which is available upon request. Fuller discussion is contained in the Handbook of Labor Statistics (Bulletin 916).

ABLE A-2: Estimated Number of Wage and Salary Workers in Nonagricultural Establishments, by Industry Division [1]

[In thousands]

Industry division	1948								1947					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1943	1939
tal estimated employment	45,487	45,074	45,008	44,616	44,299	44,600	44,279	44,603	45,618	44,918	44,758	44,513	44,125	42,042	30,287
anufacturing	16,451	16,155	16,113	15,892	15,950	16,269	16,183	16,267	16,354	16,256	16,209	16,175	15,962	17,381	10,078
ining	950	922	950	935	817	924	914	922	925	923	922	921	923	917	845
Anthracite	83	81	82	81	82	82	81	81	81	81	81	81	82	83	89
Bituminous coal	425	395	426	423	309	419	415	422	421	417	415	412	408	437	388
Metal	99	103	104	102	103	102	101	100	100	100	99	100	102	126	103
Quarrying and nonmetallic	97	97	97	95	93	90	87	89	94	96	97	98	99	90	76
Crude petroleum and natural gas production [2]	246	246	241	234	230	231	230	230	229	229	230	230	232	181	189
ntract construction [3]	2,257	2,217	2,173	2,052	1,933	1,805	1,731	1,871	1,978	2,046	2,099	2,107	2,096	1,567	1,150
ansportation and public utilities [4]	4,137	4,135	4,105	4,042	3,974	4,032	4,019	4,020	4,071	4,077	4,097	4,134	4,163	3,619	2,912
Transportation [4]	2,867	2,872	2,860	2,809	2,744	2,808	2,802	2,809	2,858	2,872	2,899	2,929	2,946	2,746	2,080
Communication	747	745	734	731	731	728	723	719	719	713	707	713	722	488	391
Other public utilities	523	518	511	502	499	496	494	492	494	492	491	492	495	385	441
ade	9,659	9,647	9,671	9,617	9,576	9,598	9,520	9,622	10,288	9,886	9,684	9,471	9,356	7,322	6,705
nance	1,761	1,754	1,726	1,716	1,704	1,697	1,690	1,680	1,676	1,673	1,671	1,668	1,688	1,401	1,382
rvice	4,622	4,645	4,663	4,738	4,768	4,729	4,730	4,723	4,688	4,670	4,662	4,634	4,619	3,786	3,228
overnment [4]	5,650	5,599	5,607	5,624	5,577	5,546	5,492	5,498	5,638	5,387	5,414	5,403	5,318	6,049	3,987
Federal	1,855	1,833	1,804	1,788	1,771	1,758	1,746	1,743	1,985	1,751	1,744	1,761	1,795	2,875	898
State and local [4]	3,795	3,766	3,803	3,836	3,806	3,788	3,746	3,755	3,653	3,636	3,670	3,642	3,523	3,174	3,089

Estimates are based upon reports submitted by cooperating establishments and therefore differ from employment information obtained by household interviews, such as the Monthly Report on the Labor Force. The Bureau of Labor Statistics estimates of employment in nonagricultural establishments differ from those of the Monthly Report on the Labor Force (table A-1) in several important respects. The Bureau of Labor Statistics estimates cover all full- and part-time wage and salary workers in private nonagricultural establishments who worked or received pay during the pay period ending nearest the 15th of the month, in Federal establishments during the pay period ending just before the first of the month, and in State and local government during the pay period ending on or just before the last of the month. Persons who worked in more than one establishment during the reporting period would be counted more than once. Proprietors, self-employed persons, domestic servants, unpaid family workers, and personnel of the armed forces are excluded. These estimates have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Data for the current and immediately preceding months are subject to revision.

[2] Includes well drilling and rig building.

[3] These figures cover all employees of private firms whose major activity is construction. They are not directly comparable with the construction employment estimates presented in table 2, p. 1111, of the June 1947 issue of this publication, which include self-employed persons, working proprietors, and force-account workers and other employees of nonconstruction firms or public bodies who engage in construction work, as well as all employees of construction firms. An article presenting this other construction employment series appeared in the August 1947 issue of this publication, and will appear quarterly thereafter.

[4] Figures are not strictly comparable with those of preceding months because of the transfer of some companies from private to municipal operation in October 1947.

TABLE A-3: Estimated Number of Wage and Salary Workers in Manufacturing Industries, by Major Industry Group [1]

[In thousands]

Major industry group	1948								1947					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1943	1939
l manufacturing	16,451	16,155	16,113	15,892	15,950	16,269	16,183	16,267	16,354	16,256	16,209	16,175	15,962	17,381	10,078
Durable goods	8,188	8,145	8,121	8,114	8,164	8,258	8,167	8,256	8,274	8,194	8,126	8,070	7,987	10,297	4,357
Nondurable goods	8,263	8,010	7,992	7,778	7,786	8,011	8,016	8,011	8,080	8,062	8,083	8,105	7,975	7,084	5,720
on and steel and their products	1,929	1,895	1,904	1,894	1,897	1,929	1,920	1,925	1,922	1,908	1,896	1,892	1,884	2,034	1,171
ectrical machinery	717	713	724	727	742	756	763	767	773	772	763	752	745	914	355
achinery, except electrical	1,555	1,561	1,579	1,568	1,562	1,587	1,591	1,583	1,589	1,569	1,565	1,560	1,552	1,585	690
ransportation equipment, except automobiles	543	556	562	565	589	589	589	598	591	578	552	540	530	2,951	193
utomobiles	958	984	918	964	979	985	914	989	983	961	964	960	926	845	466
onferrous metals and their products	466	456	468	467	475	482	478	478	482	479	472	468	463	525	283
umber and timber basic products	930	912	881	851	833	827	813	816	829	828	827	821	821	589	465
urniture and finished lumber products	551	542	550	548	561	576	581	580	578	573	565	557	549	429	385
one, clay, and glass products	539	526	535	530	526	527	518	520	527	526	522	520	517	422	349
extile-mill products and other fiber manufactures	1,397	1,366	1,418	1,416	1,425	1,435	1,428	1,413	1,409	1,391	1,368	1,341	1,320	1,330	1,235
pparel and other finished textile products	1,334	1,235	1,263	1,247	1,268	1,334	1,333	1,311	1,305	1,277	1,287	1,251	1,222	1,080	894
eather and leather products	431	422	419	404	418	442	448	445	446	442	438	435	429	378	383
ood	1,965	1,912	1,789	1,610	1,562	1,655	1,658	1,688	1,735	1,769	1,833	1,964	1,922	1,418	1,192
obacco manufactures	99	96	98	97	99	100	101	101	102	104	103	100	99	103	105
aper and allied products	478	475	477	476	476	480	479	482	484	479	476	470	469	389	320
rinting, publishing, and allied industries	718	716	719	718	718	722	724	726	732	726	720	713	710	549	561
hemicals and allied products	773	748	759	759	767	773	773	774	778	777	773	763	750	873	421
roducts of petroleum and coal	247	245	245	242	238	238	237	238	238	239	237	238	238	170	147
ubber products	244	238	243	243	246	253	257	259	261	259	257	252	252	231	150
Miscellaneous industries	577	557	562	566	569	579	578	574	590	599	591	578	564	563	311

Estimates include all full- and part-time production and nonproduction workers in manufacturing industries who worked or received pay during the pay period ending nearest the 15th of the month. These estimates have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series.

TABLE A-4: Estimated Number of Wage and Salary Workers in Manufacturing Industries, by Sta

[In thousands]

Region and State	1948							1947						Ann...
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	
New England:														
Maine [1]	116.5	115.2	108.2	106.7	115.2	116.5	116.9	118.5	117.4	116.9	119.6	119.4	112.9	
New Hampshire	82.1	82.7	81.6	82.6	84.4	85.6	85.8	85.3	83.9	82.9	82.1	80.7	77.6	
Vermont [1]	37.0	37.8	37.8	38.1	38.7	38.8	39.1	40.0	39.5	39.3	39.2	39.1	37.2	
Massachusetts	711.1	726.1	723.4	729.7	745.7	746.0	747.3	757.2	753.2	741.6	732.5	720.4	707.2	
Rhode Island	144.8	146.5	147.0	149.9	153.6	154.5	153.5	154.6	154.3	152.9	148.1	143.0	141.4	
Connecticut [1]	393.3	396.5	401.1	406.4	412.5	412.1	413.2	417.8	415.7	414.8	409.2	406.0	403.3	
Middle Atlantic:														
New York	1,816.5	1,831.7	1,829.0	1,850.4	1,902.6	1,906.4	1,905.8	1,924.6	1,918.6	1,922.8	1,900.1	1,870.8	1,801.9	
New Jersey	732.1	741.8	740.7	746.0	753.7	757.8	757.3	764.0	757.4	751.4	749.2	735.9	719.6	
Pennsylvania	1,476.1	1,492.4	1,487.3	1,495.5	1,512.2	1,510.9	1,513.4	1,527.3	1,523.1	1,517.9	1,504.5	1,490.7	1,471.1	
East North Central:														
Ohio	1,215.7	1,228.2	1,221.3	1,230.7	1,244.0	1,243.9	1,246.0	1,250.9	1,247.3	1,244.7	1,244.0	1,238.1	1,232.0	
Indiana	544.0	546.4	541.9	540.0	552.8	553.4	556.3	559.0	558.7	561.0	580.0	552.3	550.0	
Illinois	1,227.4	1,228.7	1,203.5	1,198.0	1,253.5	1,267.0	1,271.0	1,273.6	1,266.3	1,257.0	1,249.0	1,237.8	1,228.6	
Michigan	996.8	962.7	998.5	1,002.7	1,010.9	970.7	1,019.6	1,024.2	1,019.0	1,021.8	1,023.3	1,004.6	997.0	
Wisconsin [1]	447.9	429.7	420.0	426.3	432.5	434.2	433.9	436.1	433.1	433.3	452.0	446.6	461.5	
West North Central:														
Minnesota [1]	206.6	203.3	190.9	188.7	198.0	199.0	200.0	202.0	201.3	200.2	210.6	206.8	205.6	
Iowa [1]	152.1	149.8	135.1	133.8	153.7	154.7	155.5	156.3	153.9	151.3	152.3	151.3	149.8	
Missouri [1]	345.7	343.9	339.3	339.9	346.6	349.2	350.3	351.7	352.7	351.9	348.7	348.9	343.5	
North Dakota	7.0	7.1	6.7	6.4	6.3	6.4	6.6	6.7	6.8	6.7	6.7	6.9	6.8	
South Dakota	11.8	11.9	11.3	11.3	11.0	11.1	11.2	11.3	11.5	11.4	11.3	11.5	11.8	
Nebraska	43.6	43.0	36.1	34.9	42.4	43.0	43.8	46.3	45.9	45.1	43.1	43.2	43.4	
Kansas	83.9	84.5	77.0	73.3	77.6	78.3	80.5	81.9	79.9	79.8	79.4	80.0	80.7	
South Atlantic:														
Delaware	46.6	46.6	45.8	*46.5	46.5	45.9	45.7	46.1	45.8	45.8	48.2	48.4	45.2	
Maryland	232.8	229.4	228.5	228.2	228.9	228.5	226.9	229.6	231.1	229.3	232.4	228.2	217.4	
District of Columbia	17.2	17.1	17.2	17.4	17.1	16.8	17.3	17.5	17.4	17.5	17.5	17.3	17.4	
Virginia	210.9	211.1	210.8	212.8	213.7	213.5	213.6	215.1	217.3	217.0	214.5	211.5	208.2	
West Virginia	133.3	133.9	132.4	131.9	130.9	130.3	132.4	132.5	133.0	133.4	132.8	132.5	131.0	
North Carolina	362.9	381.7	381.4	382.6	385.8	380.4	382.7	380.8	378.7	374.1	368.1	366.6	365.2	
South Carolina	195.8	200.5	199.3	199.3	200.5	196.9	198.3	198.9	197.6	194.8	192.3	192.0	191.5	
Georgia [2]	274.3	275.7	273.8	276.4	281.5	280.5	281.7	280.4	283.5	280.3	281.6	278.3	262.5	
Florida [1]	88.0	90.0	93.2	96.5	99.4	98.9	100.3	97.8	95.0	90.4	88.6	86.8	85.7	
East South Central:														
Kentucky	126.8	127.0	125.9	128.2	129.5	129.4	129.5	130.4	130.7	130.3	128.2	125.8	122.4	
Tennessee	249.5	250.7	250.8	251.5	252.8	252.8	252.1	252.4	253.0	253.8	251.8	250.8	246.2	
Alabama [1]	229.8	228.3	228.0	227.3	231.8	231.1	233.7	231.9	231.8	228.9	226.5	221.4	219.6	
Mississippi	91.3	89.5	88.1	88.6	90.0	90.5	95.5	95.7	95.5	94.1	95.0	95.3	91.4	
West South Central:														
Arkansas [1]	76.5	76.6	75.1	74.8	74.3	74.4	75.3	76.1	77.1	77.1	81.2	80.5	75.1	
Louisiana [1]	148.2	149.4	146.0	147.5	145.8	142.5	150.2	151.2	153.1	149.2	149.5	150.3	143.3	
Oklahoma [1]	66.7	68.9	65.2	65.5	62.6	62.6	64.0	64.7	64.9	64.3	64.1	64.0	62.9	
Texas	350.7	354.8	341.7	338.7	337.1	340.2	342.9	346.8	347.6	339.9	337.8	341.5	335.1	
Mountain:														
Montana	18.1	17.7	17.1	17.1	17.2	17.3	17.7	18.5	18.7	19.1	18.1	18.2	18.4	
Idaho [2]	20.6	18.8	18.1	16.7	16.9	17.6	18.2	19.5	21.2	22.4	22.6	23.8	22.9	
Wyoming	6.8	6.8	6.5	6.3	6.2	6.1	6.1	7.0	7.2	7.1	6.8	6.8	6.7	
Colorado	56.5	56.3	53.3	54.0	55.5	55.1	57.2	61.0	60.3	60.6	57.9	56.6	55.9	
New Mexico [1]	10.4	10.0	9.3	8.8	*8.2	*8.2	*8.3	8.6	8.6	8.8	9.1	9.3	9.1	
Arizona [1]	15.7	16.0	15.7	15.3	14.8	14.6	14.7	14.7	14.6	14.0	13.8	13.4	14.0	
Utah	28.7	26.0	24.2	22.6	23.9	23.9	25.1	26.8	27.3	29.4	30.1	26.3	29.1	
Nevada [1]	3.4	3.4	3.3	3.3	3.3	3.3	3.3	3.3	3.5	3.5	3.4	3.4	3.4	
Pacific:														
Washington	179.9	163.4	152.4	175.3	173.7	173.0	173.0	174.6	178.2	183.9	191.7	185.0	176.5	
Oregon	117.3	112.8	110.7	110.2	110.2	109.2	109.8	111.4	112.2	117.2	122.2	122.4	116.6	
California	741.3	713.0	696.3	695.8	700.4	703.5	705.0	715.1	717.7	736.4	744.8	760.2	704.0	

[1] Revised data in all except the first three columns are identified by an asterisk for the first month's publication of such data. Comparable series, January 1943 to date, available upon request to U. S. Department of Labor, or cooperating State Agency listed below.

[2] 1943 averages may not be strictly comparable with current data for those States now on Standard Industrial Classification.

[3] Series based on Standard Industrial Classification. Data for Georgia, Idaho, and Louisiana may not be strictly comparable with those published prior to the current report.

* Revised.

Cooperating State Agencies:

Alabama—Department of Industrial Relations, Montgomery 5.
Arizona—Unemployment Compensation Division, Employment Security Commission, Phoenix.
Arkansas—Employment Security Division, Department of Labor, Little Rock.
California—Division of Labor Statistics and Research, Department of Industrial Relations, San Francisco 3.
Connecticut—Employment Security Division, Department of Labor and Factory Inspection, Hartford 15.
Delaware—Federal Reserve Bank of Philadelphia, Philadelphia 1, Pa.
Florida—Unemployment Compensation Division, Industrial Commission, Tallahassee.
Georgia—Employment Security Agency, Department of Labor, Atlanta 3.
Idaho—Employment Security Agency, Industrial Accident Board, Boise.
Illinois—Department of Labor, Chicago 1.
Indiana—Employment Security Division, Indianapolis 4.
Iowa—Employment Security Commission, Des Moines 8.
Kansas—State Labor Department, Topeka.
Louisiana—Division of Employment Security, Department of Labor, Baton Rouge 4.
Maine—Unemployment Compensation Commission, Augusta.
Maryland—Department of Labor and Industry, Baltimore 2.
Massachusetts—Division of Statistics, Department of Labor and Industries, Boston 10.
Michigan—Department of Labor and Industry, Lansing 13.
Minnesota—Division of Employment and Security, Department of Social Security, St. Paul 1.
Missouri—Division of Employment Security, Department of Labor and Industrial Relations, Jefferson City.
Montana—Unemployment Compensation Commission, Helena.
Nebraska—Division of Placement and Unemployment Insurance, Department of Labor, Lincoln 1.
Nevada—Employment Security Department, Carson City.
New Jersey—Department of Labor, Trenton 8.
New Mexico—Employment Security Commission, Albuquerque.
New York—Division of Placement and Unemployment Insurance, Department of Labor, New York 17.
North Carolina—Department of Labor, Raleigh.
Oklahoma—Employment Security Commission, Oklahoma City.
Pennsylvania—Federal Reserve Bank of Philadelphia, Philadelphia (manufacturing); Bureau of Research and Information, Department of Labor and Industry, Harrisburg (nonmanufacturing).
Rhode Island—Division of Census and Information, Department of Labor, Providence 2.
Tennessee—Department of Employment Security, Nashville 3.
Texas—Bureau of Business Research, University of Texas, Austin 12.
Utah—Department of Employment Security, Industrial Commission, Salt Lake City 13.
Vermont—Unemployment Compensation Commission, Montpelier.
Virginia—Division of Research and Statistics, Department of Labor and Industry, Richmond 21.
Washington—Employment Security Department, Olympia.
Wisconsin—Statistical Department, Industrial Commission, Madison.
Wyoming—Employment Security Commission, Casper.

TABLE A–5: Estimated Number of Production Workers in Manufacturing Industries [1]

[In thousands]

Industry group and industry	1948								1947					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1943	1939
manufacturing	13,233	12,973	12,954	12,738	12,791	13,131	13,066	13,150	13,263	13,176	13,143	13,125	12,928	14,560	8,192
Durable goods	6,700	6,667	6,658	6,642	6,683	6,791	6,711	6,795	6,816	6,746	6,681	6,630	6,555	8,727	3,611
Nondurable goods	6,533	6,306	6,296	6,096	6,108	6,340	6,355	6,355	6,447	6,430	6,462	6,495	6,373	5,834	4,581
Durable goods															
and steel and their products	1,631	1,601	1,610	1,600	1,603	1,634	1,628	1,634	1,633	1,619	1,609	1,604	1,597	1,761	991
Blast furnaces, steel works, and rolling mills		526.5	523.0	517.7	511.8	516.1	508.5	508.8	506.5	505.6	505.1	505.1	508.6	516.7	388.4
Gray-iron and semisteel castings		104.7	108.8	107.1	110.7	113.9	114.5	114.4	113.8	113.1	113.1	112.4	113.6	88.4	62.2
Malleable-iron castings		36.1	37.9	37.3	37.2	37.9	37.8	37.9	37.6	36.7	36.1	35.6	35.4	28.8	19.2
Steel castings		68.2	69.6	68.4	68.6	69.3	68.6	67.7	67.0	66.4	66.2	66.2	65.5	90.1	32.1
Cast-iron pipe and fittings		28.6	28.9	28.4	27.6	28.3	28.0	28.7	28.7	28.3	28.1	27.8	27.5	18.0	17.6
Tin cans and other tinware		47.4	44.7	42.8	42.1	44.5	45.7	47.4	47.8	47.1	47.0	48.4	47.6	32.4	31.8
Wire drawn from purchased rods		28.0	28.7	29.4	30.1	30.6	30.9	31.4	31.6	31.2	31.0	30.5	30.8	36.0	22.0
Wirework		41.8	40.2	41.1	41.9	43.4	42.5	43.5	42.4	40.5	40.6	41.1	40.3	32.8	30.4
Cutlery and edge tools		21.8	22.1	23.1	23.7	24.0	24.6	24.7	25.0	24.8	24.5	23.9	23.3	21.8	15.4
Tools (except edge tools, machine tools, files, and saws)		24.6	25.1	25.2	25.5	25.7	25.8	25.9	25.9	25.4	25.0	24.6	24.4	27.8	15.3
Hardware		49.3	49.8	51.9	53.0	54.3	54.1	53.2	52.6	51.1	50.3	49.3	48.3	45.3	35.7
Plumbers' supplies		38.8	40.3	39.3	39.4	40.2	40.0	40.0	40.0	39.6	38.7	38.4	38.5	25.0	26.2
Stoves, oil burners, and heating equipment, not elsewhere classified		78.7	78.7	79.5	77.8	83.1	86.5	88.5	90.9	91.5	91.1	90.3	86.4	60.4	49.2
Steam and hot-water heating apparatus and steam fittings		57.0	60.5	60.8	59.8	62.7	63.2	62.6	62.5	61.8	61.7	61.2	61.3	64.4	32.3
Stamped and enameled ware and galvanizing		110.1	111.0	110.9	112.2	114.1	115.1	115.5	117.1	116.4	115.3	114.7	111.9	97.0	59.2
Fabricated structural and ornamental metalwork		59.3	59.6	60.0	60.6	60.7	60.2	60.5	60.7	60.5	59.8	60.3	60.3	71.0	35.5
Metal doors, sash, frames, molding, and trim		10.4	10.4	10.2	10.1	10.5	10.2	10.8	10.9	10.7	10.5	10.3	10.1	12.8	7.7
Bolts, nuts, washers, and rivets		28.1	28.5	28.6	28.9	28.9	28.7	28.7	28.6	28.4	27.8	28.3	28.4	31.6	15.2
Forgings, iron and steel		35.1	34.9	35.1	36.7	37.5	37.6	37.8	37.4	36.8	36.7	36.3	36.2	43.6	16.4
Wrought pipe, welded and heavy-riveted		19.8	20.1	18.8	18.8	19.2	19.1	19.8	19.6	18.9	18.4	17.8	17.7	28.4	8.9
Screw-machine products and wood screws		35.2	35.9	36.4	36.8	36.8	36.6	36.1	35.8	35.5	35.4	35.3	35.4	53.8	18.0
Steel barrels, kegs, and drums		7.9	7.9	7.6	7.7	7.9	8.1	8.4	8.2	8.0	8.0	8.2	8.3	8.5	6.5
Firearms		21.5	21.4	21.2	21.0	20.8	20.4	20.0	19.7	19.3	19.0	18.5	18.3	71.7	5.3
ctrical machinery	538	535	546	548	563	577	584	588	596	595	588	578	569	741	259
Electrical equipment		351.4	356.7	357.4	364.9	371.7	376.5	378.4	382.2	380.3	377.1	373.7	368.2	497.5	182.7
Radios and phonographs		85.8	88.9	90.0	93.4	97.6	99.2	100.3	104.8	106.3	104.3	99.6	96.8	124.1	44.0
Communication equipment		86.9	90.2	90.0	93.9	96.5	97.2	98.2	98.2	97.5	95.6	93.6	93.3	119.3	32.5
chinery, except electrical	1,193	1,199	1,217	1,207	1,202	1,232	1,237	1,231	1,235	1,218	1,214	1,209	1,198	1,293	529
Machinery and machine-shop products		487.5	493.2	489.6	495.9	500.1	502.8	500.2	498.9	497.3	498.8	498.7	495.1	586.0	207.6
Engines and turbines		52.3	52.1	53.5	53.9	54.7	54.4	54.6	54.5	53.0	53.3	53.5	53.5	79.5	18.7
Tractors		60.0	60.4	56.3	44.8	62.2	61.9	61.4	60.3	58.6	58.0	57.1	55.7	52.4	31.3
Agricultural machinery, excluding tractors		74.8	76.3	75.2	76.2	75.9	74.6	72.3	71.0	68.0	67.5	67.6	66.4	45.1	28.5
Machine tools		46.8	47.0	47.5	47.7	49.2	50.4	50.4	51.3	51.1	52.1	52.3	52.5	109.7	36.6
Machine-tool accessories		51.8	55.4	55.4	55.5	55.9	56.3	56.4	56.3	55.8	55.6	56.0	56.4	105.4	25.8
Textile machinery		41.3	42.0	41.6	41.4	41.1	40.8	40.7	40.6	39.8	39.3	37.3	36.4	28.5	21.9
Pumps and pumping equipment		66.3	67.7	69.3	69.9	71.3	73.0	73.1	72.8	72.2	72.3	73.9	73.3	92.8	24.9
Typewriters		22.8	23.7	23.8	24.1	24.9	25.1	25.8	25.9	25.2	24.8	24.2	23.6	12.0	16.2
Cash registers; adding, and calculating machines		45.2	45.8	45.6	46.3	46.1	45.9	45.3	45.2	44.1	43.0	42.1	41.0	34.8	19.7
Washing machines, wringers, and driers, domestic		15.6	16.4	16.0	16.2	16.3	16.5	16.2	16.3	15.8	15.3	14.9	15.1	13.3	7.5
Sewing machines, domestic and industrial		14.1	14.0	13.9	13.8	13.7	13.5	13.4	13.3	13.0	12.6	12.1	12.1	10.7	7.8
Refrigerators and refrigeration equipment		84.2	84.8	82.5	79.7	81.0	81.6	82.6	81.5	80.1	79.7	79.1	78.6	54.4	35.2
ansportation equipment, except automobiles	415	430	434	438	462	465	464	472	463	452	427	414	405	2,508	159
Locomotives		26.4	26.3	26.4	26.6	26.6	26.5	26.3	26.3	26.0	25.9	25.1	24.4	34.1	6.5
Cars, electric- and steam-railroad		54.5	55.0	53.9	53.9	54.4	54.0	55.9	56.9	56.8	55.2	55.4	54.6	60.5	24.5
Aircraft and parts, excluding aircraft engines		130.3	127.6	125.1	137.3	136.1	135.3	134.7	133.2	133.4	133.9	129.7	130.7	794.9	39.7
Aircraft engines		25.6	25.9	25.1	24.8	24.6	24.9	25.3	25.9	25.9	26.2	26.6	26.7	233.5	8.9
Shipbuilding and boatbuilding		103.7	108.9	116.1	122.5	125.8	127.7	132.9	125.7	117.6	100.2	93.0	87.1	1,225.2	69.2
Motorcycles, bicycles, and parts		10.8	12.4	12.9	14.4	14.8	14.6	14.5	14.7	14.4	14.1	13.9	13.6	10.0	7.0
tomobiles	762	784	737	767	772	784	720	789	785	766	764	767	741	714	402
nferrous metals and their products	395	388	398	398	406	413	409	409	413	410	404	400	396	449	229
Smelting and refining, primary, of nonferrous metals		41.9	41.9	41.4	41.0	40.8	40.2	39.9	40.0	39.7	39.7	39.8	39.9	56.4	27.6
Alloying; and rolling and drawing of nonferrous metals, except aluminum		51.8	52.5	52.6	53.7	54.6	53.1	53.6	53.4	52.9	53.0	53.2	53.4	75.8	38.8
Clocks and watches		25.9	28.3	28.3	28.5	28.8	28.6	28.6	28.6	28.4	28.1	27.8	27.2	25.2	20.3
Jewelry (precious metals) and jewelers' findings		25.7	26.3	26.4	27.1	27.6	27.5	27.3	27.7	28.1	27.5	26.4	25.6	20.5	14.4
Silverware and plated ware		26.4	27.3	27.2	27.5	27.5	27.1	26.8	27.1	26.5	26.1	25.5	25.0	15.1	12.1

See footnotes at end of table

TABLE A–5: Estimated Number of Production Workers in Manufacturing Industries [1]—Continued

[In thousands]

Industry group and industry	1948								1947					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1943	1939
Durable goods—Continued															
Nonferrous metals and their products—Con.															
Lighting equipment		30.2	30.8	30.4	31.3	33.1	33.9	33.6	34.1	34.3	34.9	35.2	35.3	28.2	26.
Aluminum manufactures		39.0	42.2	42.7	44.2	45.2	45.2	45.3	44.8	43.6	43.1	42.4	41.0	79.4	23.
Sheet-metal work, not elsewhere classified		35.5	34.9	35.2	36.0	36.8	36.9	37.3	39.4	39.2	38.8	37.6	37.7	37.9	18.
Lumber and timber basic products [2]	844	828	799	772	754	749	736	738	750	751	751	745	745	535	42
Sawmills and logging camps		680.0	653.1	627.7	611.0	606.9	594.1	597.7	610.7	612.8	616.3	613.3	614.6	435.8	31
Planing and plywood mills		147.7	145.8	144.0	142.7	142.3	141.1	140.8	139.4	137.7	134.5	132.0	130.8	99.2	7
Furniture and finished lumber products	461	452	459	458	470	485	490	489	487	483	475	466	460	366	32
Mattresses and bedsprings		31.0	31.2	31.2	32.7	34.6	36.2	36.3	36.0	35.9	34.9	33.3	31.5	21.7	2
Furniture		228.1	231.7	233.3	239.7	246.9	249.4	248.6	246.8	243.6	238.6	233.1	230.3	200.0	17
Wooden boxes, other than cigar		33.2	33.2	32.5	33.7	34.6	35.2	35.5	34.8	35.3	36.0	35.8	35.6	35.4	2
Caskets and other morticians' goods		17.6	18.1	18.6	19.0	19.6	19.4	19.7	19.8	19.7	19.4	19.6	19.4	14.2	1
Wood preserving		16.1	15.7	15.4	15.1	15.6	15.7	16.5	16.9	17.4	17.9	18.2	18.9	12.4	1
Wood, turned and shaped		31.6	33.1	32.1	32.8	33.5	32.9	32.2	32.8	32.5	31.6	31.4	31.5	26.4	2
Stone, clay, and glass products	461	450	458	454	451	452	443	445	454	452	449	447	444	360	29
Glass and glassware		111.0	116.5	117.5	117.9	117.8	115.1	117.2	119.7	120.1	120.0	118.9	118.2	99.8	7
Glass products made from purchased glass		12.4	12.3	12.2	12.4	12.5	12.4	12.5	12.7	12.6	12.2	12.0	12.0	11.3	1
Cement		38.1	37.6	37.1	36.6	36.4	36.6	36.3	36.7	36.8	36.8	37.0	36.8	27.1	2
Brick, tile, and terra cotta		79.8	80.1	77.7	76.1	75.5	73.7	76.3	76.3	75.8	75.6	75.4	75.1	52.5	5
Pottery and related products		55.6	57.6	57.1	56.6	57.6	56.5	56.1	57.6	57.2	56.1	55.9	56.1	45.0	3
Gypsum		6.7	6.6	6.5	6.6	6.6	6.6	6.6	6.6	6.5	6.4	6.1	6.1	4.5	
Wallboard, plaster (except gypsum), and mineral wool		2.7	12.6	12.6	12.6	12.4	12.5	12.6	12.7	12.7	12.3	12.1	11.8	11.1	8
Lime		9.4	9.3	9.5	9.6	9.5	9.3	9.3	9.3	9.5	9.1	9.2	9.2	9.3	9
Marble, granite, slate, and other products		18.6	18.4	18.1	17.9	18.4	17.9	18.0	18.3	18.5	18.4	18.5	18.4	12.5	1
Abrasives		18.3	17.8	17.5	17.5	17.5	17.1	13.8	16.8	16.5	16.5	16.9	16.2	23.4	7
Asbestos products		20.8	21.6	21.8	21.9	22.0	21.8	21.9	21.7	21.3	21.3	21.0	20.6	22.0	15
Nondurable goods															
Textile-mill products and other fiber manufactures	1,274	1,243	1,295	1,293	1,301	1,312	1,306	1,292	1,290	1,271	1,249	1,223	1,202	1,237	1,144
Cotton manufactures, except smallwares		508.9	527.7	524.7	526.4	529.4	525.3	523.6	523.2	516.9	508.2	498.9	494.1	526.3	418
Cotton smallwares		13.4	14.0	14.4	14.6	14.9	14.9	14.6	14.3	13.9	13.7	13.4	13.1	17.8	14
Silk and rayon goods		108.2	112.6	111.8	111.7	111.6	110.8	107.4	108.2	106.9	105.7	103.3	101.5	104.1	126
Woolen and worsted manufactures, except dyeing and finishing		167.2	173.8	173.2	175.0	178.3	179.5	177.4	177.3	174.2	170.9	168.7	162.9	174.1	157
Hosiery		125.6	135.3	136.6	139.2	141.2	140.2	139.1	138.4	136.2	133.4	130.2	128.2	125.9	168
Knitted cloth		11.1	11.2	11.5	11.8	11.7	11.7	11.6	11.5	11.5	11.2	11.0	10.9	12.6	11
Knitted outerwear and knitted gloves		28.1	30.8	31.4	31.0	31.6	31.5	30.6	31.3	31.4	30.8	29.6	27.9	34.8	29
Knitted underwear		46.6	48.1	48.6	50.0	50.3	49.8	49.1	48.8	47.8	46.9	45.6	45.0	44.9	40
Dyeing and finishing textiles, including woolen and worsted		84.5	86.5	87.5	88.3	88.5	88.9	87.9	87.5	85.9	85.1	83.0	81.2	80.2	70
Carpets and rugs, wool		37.1	37.2	36.9	36.6	36.6	36.2	35.7	35.4	34.4	33.6	32.9	32.4	24.5	27
Hats, fur-felt		12.3	13.4	12.9	12.7	13.7	13.7	13.7	13.8	13.6	13.6	13.2	13.3	11.0	13
Jute goods, except felts		4.3	4.3	4.2	4.3	4.1	4.2	4.0	3.1	3.0	3.0	2.9	3.0	4.2	3
Cordage and twine		15.8	16.2	16.4	16.7	17.1	17.2	16.8	16.5	16.1	15.4	14.7	14.9	18.3	12
Apparel and other finished textile products	1,160	1,070	1,095	1,082	1,103	1,165	1,166	1,147	1,143	1,117	1,127	1,096	1,071	958	790
Men's clothing, not elsewhere classified		296.5	314.4	309.8	310.0	314.5	311.3	308.1	310.5	309.2	306.9	299.4	294.7	265.9	223
Shirts, collars, and nightwear		75.8	80.0	80.9	82.0	82.2	82.0	81.6	82.4	81.1	79.3	77.2	75.1	67.2	74
Underwear and neckwear, men's		16.7	18.2	18.4	18.7	19.0	18.7	18.1	18.4	18.1	17.3	17.1	16.6	16.3	17
Work shirts		18.5	18.6	18.2	17.9	17.5	16.8	15.8	15.5	15.5	15.8	15.9	15.6	18.5	14
Women's clothing, not elsewhere classified		437.0	435.4	427.6	440.0	481.7	485.3	476.2	470.5	452.1	462.3	452.1	440.4	345.3	280
Corsets and allied garments		17.0	18.1	18.5	19.2	19.9	20.1	19.7	19.6	19.4	18.8	18.1	17.5	16.5	16
Millinery		22.4	20.3	20.5	23.6	27.6	27.9	26.4	23.5	21.6	25.2	23.8	23.6	23.3	25
Handkerchiefs		3.9	4.9	5.0	5.1	5.1	5.0	4.9	5.1	5.2	5.1	5.0	4.6	5.7	5
Curtains, draperies, and bedspreads		25.1	26.4	26.4	27.7	30.6	33.8	31.6	32.2	32.1	30.9	28.7	27.3	25.2	17
Housefurnishings, other than curtains, etc		28.2	27.9	27.7	29.0	30.4	29.2	30.0	30.6	30.0	31.6	30.6	29.4	24.0	11
Textile bags		28.2	27.3	26.8	26.8	27.3	27.8	28.2	28.6	28.4	28.1	27.8	27.3	19.6	12
Leather and leather products [2]	384	376	373	359	372	396	402	399	400	396	393	390	385	340	345
Leather		47.2	47.9	47.5	47.6	49.2	50.3	50.2	50.3	50.2	50.2	49.8	49.1	46.5	56
Boot and shoe cut stock and findings		17.7	17.8	17.3	17.7	18.9	19.5	19.7	19.8	19.8	19.6	19.3	19.2	19.2	20
Boots and shoes		240.2	236.6	225.5	235.9	254.1	257.8	256.2	255.4	251.1	248.8	247.6	245.7	205.6	230
Leather gloves and mittens		12.8	12.9	12.4	12.2	12.5	12.5	12.2	13.0	13.2	13.1	12.8	12.7	15.4	16
Trunks and suitcases		13.3	13.3	13.2	13.3	13.9	14.0	13.3	14.2	14.8	14.4	13.5	12.7	13.7	6
Food	1,414	1,367	1,259	1,091	1,047	1,149	1,159	1,191	1,255	1,288	1,353	1,483	1,442	1,056	855
Slaughtering and meat packing		190.3	188.9	116.2	97.1	180.9	187.0	196.7	203.7	191.7	183.0	182.0	182.9	174.0	135
Butter		39.3	40.5	39.2	36.9	34.3	32.0	32.6	32.9	33.9	34.8	35.8	37.8	33.2	20
Condensed and evaporated milk		22.4	23.0	21.6	20.5	19.3	18.8	18.4	18.6	19.5	20.5	21.2	22.7	19.9	10
Ice cream		32.6	31.6	29.2	27.1	24.4	23.6	23.6	24.9	26.3	27.8	31.1	32.8	23.0	17
Flour		39.8	38.6	37.3	37.5	37.8	38.2	39.2	39.4	39.7	39.8	39.6	39.3	32.9	25
Feeds, prepared		29.1	28.7	27.9	26.6	26.3	27.4	29.3	29.1	28.5	28.9	29.6	29.9	25.0	17

See footnotes at end of table.

TABLE A–5: Estimated Number of Production Workers in Manufacturing Industries [1]—Continued

[In thousands]

Industry group and industry	1948								1947					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1943	1939
Nondurable goods—Continued															
Food—Continued															
Cereal preparations		13.8	13.0	12.8	12.2	12.1	12.4	12.1	12.1	12.8	12.8	14.0	14.2	11.4	8.4
Baking		226.3	224.6	219.7	217.5	219.7	217.2	215.4	220.8	224.8	224.5	219.8	218.0	211.3	190.4
Sugar refining, cane		21.3	18.3	17.7	17.3	19.6	20.2	18.4	20.0	20.8	20.5	20.8	20.8	16.7	15.9
Sugar, beet		7.2	7.0	6.3	5.4	5.6	6.5	10.6	20.9	26.2	26.3	11.9	10.5	10.1	11.6
Confectionery		56.4	57.3	56.0	61.0	65.9	70.3	74.7	78.7	79.5	76.4	68.3	62.8	59.5	55.7
Beverages, nonalcoholic		44.6	41.0	38.5	36.1	34.2	32.1	33.4	33.3	34.3	35.8	39.3	39.7	32.2	23.8
Malt liquors		79.3	74.8	66.3	69.8	67.6	66.9	68.0	69.7	73.3	74.7	76.2	76.0	54.3	40.5
Canning and preserving		246.2	167.9	137.8	126.7	122.1	123.4	128.5	148.9	172.0	240.1	384.3	349.7	188.5	150.3
Tobacco manufactures [2]	86	83	85	84	86	87	88	87	88	90	89	86	85	91	93
Cigarettes		33.6	33.3	33.1	33.2	33.2	33.5	33.6	34.2	34.0	33.4	32.6	32.9	33.9	27.4
Cigars		41.7	43.6	43.7	45.2	46.2	46.2	45.8	45.6	47.8	47.0	45.5	44.5	47.5	55.8
Tobacco (chewing and smoking) and snuff		7.6	7.7	7.6	7.7	7.8	7.9	7.9	8.3	8.2	8.2	8.0	8.0	9.3	10.1
Paper and allied products [3]	391	388	390	389	389	393	392	395	398	394	392	388	387	324	265
Paper and pulp		206.0	204.2	204.7	203.7	203.8	203.0	203.0	202.8	200.7	200.2	200.0	199.8	160.3	137.8
Paper goods, other		60.5	61.7	61.5	61.4	61.0	61.9	62.6	63.8	63.3	63.0	61.4	60.6	50.2	37.7
Envelopes		12.3	12.5	12.7	12.7	12.7	12.5	12.4	12.4	12.4	12.2	12.0	11.8	10.2	8.7
Paper bags		17.4	17.5	17.6	18.0	18.2	18.0	18.1	18.2	17.9	17.9	17.7	18.0	13.1	11.1
Paper boxes		90.9	92.8	91.4	92.7	95.2	96.5	97.7	99.6	99.0	98.1	96.0	95.6	89.6	69.3
Printing, publishing, and allied industries [3]	432	430	433	432	432	435	438	439	445	444	441	437	434	331	328
Newspapers and periodicals		146.8	146.9	146.4	145.0	144.8	144.1	143.6	145.6	145.1	144.6	144.4	143.0	113.0	118.7
Printing; book and job		183.0	184.4	184.2	183.2	185.4	187.7	189.7	191.4	190.6	189.3	185.9	184.3	138.7	127.6
Lithographing		31.2	31.1	30.9	31.3	31.4	31.8	32.0	32.9	33.0	32.6	32.4	32.6	25.9	26.3
Bookbinding		33.4	35.1	35.1	35.9	37.2	37.4	37.6	38.3	38.7	38.5	38.2	38.3	29.4	25.8
Chemicals and allied products	586	564	572	572	580	587	588	588	592	589	586	576	563	734	288
Paints, varnishes, and colors		51.1	51.2	50.7	50.1	50.7	51.5	50.7	50.6	50.2	49.9	49.6	49.0	38.2	28.3
Drugs, medicines, and insecticides		62.9	63.5	63.6	64.2	65.2	65.6	65.7	65.9	66.4	67.1	67.1	66.2	56.0	27.5
Perfumes and cosmetics		10.9	10.9	11.0	11.2	11.6	12.1	12.0	12.9	13.9	13.5	12.6	12.1	14.1	10.4
Soap		22.3	22.0	21.7	21.8	24.9	25.4	25.5	25.5	25.8	25.3	24.7	23.9	17.9	15.3
Rayon and allied products		64.2	64.2	63.4	63.5	63.7	63.7	63.2	63.5	63.1	62.9	62.1	61.1	54.0	48.3
Chemicals, not elsewhere classified		192.8	198.2	195.6	198.0	196.3	196.5	197.7	198.1	196.4	195.0	195.1	196.3	144.5	69.9
Explosives and safety fuses		23.7	23.1	22.2	22.1	22.4	22.1	22.0	21.9	21.7	21.4	21.2	21.1	112.0	7.3
Compressed and liquefied gases		10.0	10.1	10.0	10.0	9.9	9.8	9.9	9.9	9.7	9.7	9.9	10.1	7.8	4.0
Ammunition, small-arms		7.7	7.8	7.8	7.8	7.8	7.8	7.7	7.4	7.2	7.2	7.0	4.4	154.1	4.3
Fireworks		2.2	2.5	2.6	2.4	2.4	2.6	2.5	2.8	2.9	2.9	2.5	2.1	28.2	1.2
Cottonseed oil		12.5	12.6	13.6	15.2	17.6	19.5	21.7	24.4	24.5	24.0	18.3	13.1	20.4	15.3
Fertilizers		23.2	24.8	29.4	33.4	34.7	32.3	30.4	28.0	26.7	26.8	26.7	25.1	27.5	18.8
Products of petroleum and coal [3]	170	170	170	167	164	165	163	164	165	165	165	166	166	125	106
Petroleum refining		117.0	116.6	114.7	113.6	113.5	112.1	112.4	112.5	112.3	112.4	113.4	114.5	83.1	73.2
Coke and byproducts		31.9	31.7	31.1	29.7	30.7	30.3	30.5	30.0	30.0	29.6	29.3	29.2	25.5	21.7
Paving materials		2.7	2.7	2.4	2.3	1.8	1.8	2.0	2.7	3.4	3.4	3.4	3.3	2.1	2.5
Roofing materials		17.4	17.7	17.3	17.4	17.4	17.6	18.0	18.3	18.5	18.4	18.4	18.2	13.1	8.1
Rubber products [3]	195	190	195	195	198	204	208	210	212	210	208	203	203	194	121
Rubber tires and inner tubes		90.9	91.9	91.4	92.6	96.4	98.9	100.6	101.9	102.4	102.0	100.5	104.7	90.1	54.2
Rubber boots and shoes		20.7	21.8	21.7	22.1	22.6	22.8	22.5	22.5	22.0	21.7	21.0	18.9	23.8	14.8
Rubber goods, other		78.9	81.7	81.7	84.0	85.7	86.5	86.8	87.7	86.1	84.0	81.9	79.6	79.9	51.9
Miscellaneous industries	441	425	429	432	436	447	445	443	459	466	459	447	435	445	244
Instruments (professional and scientific), and fire-control equipment		27.8	27.5	27.5	27.6	27.7	27.7	27.7	28.1	27.8	28.0	27.7	27.5	86.7	11.3
Photographic apparatus		38.8	38.1	37.8	38.4	38.8	39.0	38.9	39.2	38.8	38.7	38.2	38.3	35.5	17.7
Optical instruments and ophthalmic goods		23.8	25.5	26.7	27.0	27.2	27.4	27.8	28.0	27.6	27.5	27.5	27.6	33.3	11.9
Pianos, organs, and parts		12.7	13.5	13.7	13.3	14.8	15.7	16.8	17.6	17.8	17.4	16.5	14.6	12.2	7.8
Games, toys, and dolls		41.7	40.9	40.2	40.3	38.5	36.3	33.5	38.5	43.4	42.3	40.9	38.6	19.1	19.1
Buttons		12.5	12.9	12.8	13.1	13.8	13.4	13.3	13.4	12.7	12.1	11.6	11.4	13.1	11.2
Fire extinguishers		2.8	2.7	2.7	2.7	2.6	2.5	2.6	2.7	2.7	2.8	2.8	2.8	9.3	1.0

[1] Data are based upon reports from cooperating establishments covering both full- and part-time production and related workers who worked or received pay during the pay period ending nearest the 15th of the month. Major industry groups have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Data shown for the two most recent months are subject to revision without notation. Revised data in any column other than the first three are identified by an asterisk.

[2] Estimates for the individual industries comprising the major industry groups have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Comparable data from January 1939 are available upon request to the Bureau of Labor Statistics. Such requests should specify the series desired.

Data for the individual industries comprising the major industry groups listed below supersede data shown in publications dated prior to:

Major industry group	*Mimeographed release*	*Monthly Labor Review*
Tobacco manufactures	July 1948	Aug. 1948
Lumber and timber basic products	Sept. 1948	Oct. 1948
Leather and leather products	Sept. 1948	Oct. 1948
Paper and allied products	Sept. 1948	Oct. 1948
Printing, publishing, and allied industries	Sept. 1948	Oct. 1948
Products of petroleum and coal	Sept. 1948	Oct. 1948
Rubber products	Sept. 1948	Oct. 1948

TABLE A–6: Indexes of Production-Worker Employment in Manufacturing Industries [1]

[1939 average = 100]

Industry group and industry	1948								1947					A
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	19
All manufacturing	161.5	158.4	158.1	155.5	156.1	160.3	159.5	160.5	161.9	160.8	160.4	160.2	157.8	17
Durable goods	185.5	184.6	184.4	183.9	185.1	188.1	185.8	188.2	188.8	186.8	185.0	183.6	181.5	20
Nondurable goods	142.6	137.7	137.4	133.1	133.3	138.4	138.7	138.7	140.7	140.4	141.1	141.8	139.1	15
Durable goods														
Iron and steel and their products	164.5	161.4	162.4	161.4	161.7	164.8	164.2	164.9	164.7	163.3	162.3	161.7	161.0	17
Blast furnaces, steel works, and rolling mills		135.5	134.6	133.3	131.8	132.9	130.9	131.0	130.4	130.2	130.0	130.0	130.9	13
Gray-iron and semisteel castings		168.3	174.8	172.2	177.9	183.0	184.0	183.9	183.0	181.8	181.7	180.6	182.6	14
Malleable-iron castings		188.0	197.0	194.2	193.6	197.0	196.7	197.2	195.5	191.1	187.7	185.1	184.4	16
Steel castings		212.6	217.1	213.6	214.1	216.3	214.2	211.3	208.9	207.3	206.7	206.7	204.5	26
Cast-iron pipe and fittings		162.6	164.5	161.6	157.0	160.8	159.1	162.9	163.4	160.6	159.5	157.8	156.4	16
Tin cans and other tinware		149.2	140.8	134.9	132.4	140.0	143.8	149.1	150.3	148.3	148.0	152.3	149.8	16
Wire drawn from purchased rods		127.5	130.7	134.0	137.1	139.4	140.5	142.7	143.7	141.8	141.0	138.8	140.2	16
Wirework		137.6	132.4	135.2	137.9	142.9	139.9	143.0	139.4	133.2	133.6	135.3	132.5	19
Cutlery and edge tools		141.2	143.6	149.9	153.8	155.9	159.4	160.3	162.2	161.0	158.9	154.7	151.2	14
Tools, (except edge tools, machine tools, files, and saws)		160.8	163.9	164.7	166.7	167.9	168.8	169.2	169.5	166.1	163.0	160.9	157.3	16
Hardware		138.3	139.7	145.5	148.6	152.5	151.7	149.4	147.5	143.4	141.1	138.4	135.6	12
Plumbers' supplies		147.8	153.7	149.8	150.3	153.2	152.6	152.5	152.5	150.9	147.4	146.2	146.7	9
Stoves, oil burners, and heating equipment, not elsewhere classified		160.2	160.2	161.7	158.2	169.1	175.9	180.0	184.9	186.2	185.2	183.7	175.8	12
Steam and hot-water heating apparatus and steam fittings		176.4	187.4	188.2	185.2	194.2	195.7	194.0	193.7	191.3	191.2	189.7	189.8	19
Stamped and enameled ware and galvanizing		186.1	187.6	187.4	189.6	192.8	194.6	195.2	198.0	196.8	194.9	193.9	189.1	16
Fabricated structural and ornamental metalwork		167.1	167.9	169.0	170.7	170.9	169.4	170.3	171.0	170.2	168.4	169.7	169.6	20
Metal doors, sash, frames, molding, and trim		134.2	133.7	131.4	130.6	135.4	131.2	139.3	141.0	138.3	135.8	132.8	130.6	16
Bolts, nuts, washers, and rivets		184.5	187.3	187.8	189.8	190.0	188.2	188.4	187.4	186.5	182.3	185.6	186.6	20
Forgings, iron and steel		214.5	213.3	214.2	223.9	228.8	229.5	231.0	228.3	225.0	223.8	221.6	221.0	26
Wrought pipe, welded and heavy-riveted		222.1	225.1	211.0	210.8	215.5	214.6	222.5	219.7	212.5	206.6	200.0	198.6	31
Screw-machine products and wood screws		195.3	199.1	202.1	204.4	203.9	203.2	200.1	198.7	196.8	196.4	195.9	196.3	29
Steel barrels, kegs, and drums		122.4	121.7	117.7	119.5	121.9	125.5	130.3	126.4	123.5	123.8	127.3	128.4	13
Firearms		403.0	402.6	397.9	395.1	390.0	383.9	375.4	369.8	361.6	357.4	347.6	343.3	134
Electrical machinery	207.7	206.4	210.8	211.6	217.4	222.9	225.4	227.0	230.2	229.7	226.9	223.0	219.6	28
Electrical equipment		192.4	195.3	195.7	199.8	203.5	206.1	207.2	209.2	208.2	206.5	204.6	201.6	27
Radios and phonographs		195.0	202.0	204.6	212.2	221.9	225.5	228.0	238.2	241.7	237.0	226.3	220.0	28
Communication equipment		267.7	277.8	277.3	289.3	297.4	299.3	302.4	302.7	300.3	294.6	288.3	287.3	36
Machinery, except electrical	225.8	226.9	230.4	228.5	227.4	233.1	234.0	233.0	233.8	230.5	229.7	228.8	226.8	24
Machinery and machine-shop products		234.8	237.5	235.8	238.8	240.9	242.2	240.9	240.3	239.5	240.2	240.2	238.4	28
Engines and turbines		280.6	279.5	286.7	289.1	293.3	291.6	292.9	292.4	283.9	285.8	286.6	287.0	42
Tractors		191.8	193.0	180.1	143.4	198.8	197.9	196.4	192.8	187.5	185.3	182.5	178.0	16
Agricultural machinery, excluding tractors		262.2	267.4	263.7	267.0	266.1	261.6	253.5	248.8	238.4	236.6	236.9	232.8	15
Machine tools		127.7	128.4	129.7	130.4	134.5	137.6	137.6	140.2	139.5	142.4	142.9	143.2	29
Machine-tool accessories		200.4	214.5	214.4	214.8	216.6	218.0	218.6	218.1	216.2	215.3	216.8	218.5	40
Textile machinery		188.6	191.6	189.8	189.2	187.6	186.2	185.8	185.3	181.9	179.3	170.5	166.1	13
Pumps and pumping equipment		266.5	272.3	278.7	280.9	286.8	293.5	293.9	292.7	290.3	290.5	297.3	294.7	37
Typewriters		140.8	145.9	147.0	148.7	153.5	154.9	158.8	159.5	155.5	152.7	149.4	145.8	7
Cash registers; adding and calculating machines		229.5	232.9	231.8	235.2	234.2	233.4	230.2	229.4	224.1	218.5	213.9	208.3	17
Washing machines, wringers, and driers, domestic		209.5	220.0	214.6	217.0	218.4	221.1	216.8	218.1	211.2	205.1	200.1	202.2	17
Sewing machines, domestic and industrial		179.4	178.6	177.2	175.9	174.8	172.5	171.0	170.1	165.7	160.2	154.6	153.7	13
Refrigerators and refrigeration equipment		239.4	241.3	234.6	226.7	230.4	232.2	234.9	231.8	227.7	226.6	225.0	223.7	15
Transportation equipment, except automobiles	261.4	270.6	273.7	276.0	290.9	292.7	292.6	297.3	291.6	284.6	269.2	260.7	255.0	158
Locomotives		407.4	406.5	407.7	410.5	411.3	409.1	406.7	406.2	402.0	400.5	388.1	377.2	82
Cars, electric- and steam-railroad		222.3	224.4	219.6	219.7	221.8	220.2	228.0	231.8	231.4	225.2	225.7	222.8	26
Aircraft and parts, excluding aircraft engines		328.5	321.5	315.3	346.0	342.9	341.1	339.5	335.8	336.2	337.4	327.0	329.3	203
Aircraft engines		287.4	290.8	282.4	278.4	276.9	280.1	284.0	291.0	291.0	294.8	299.2	299.9	262
Shipbuilding and boatbuilding		149.8	157.2	167.6	176.8	181.6	184.4	191.9	181.5	169.9	144.7	134.3	125.8	178
Motorcycles, bicycles, and parts		154.7	177.5	185.2	206.0	211.7	209.4	207.6	210.1	207.0	201.8	200.0	195.3	14
Automobiles	189.4	195.0	183.2	190.5	191.9	195.0	178.9	202.6	195.2	190.4	190.0	190.5	184.1	17
Nonferrous metals and their products	172.4	169.1	173.8	173.7	176.9	180.0	178.5	178.4	180.3	178.8	176.3	174.7	172.8	19
Smelting and refining, primary, of nonferrous metals		151.5	151.6	149.8	148.4	147.8	145.4	144.5	144.6	143.7	143.9	144.0	144.4	20
Alloying; and rolling and drawing of nonferrous metals, except aluminum		133.5	135.3	135.6	138.3	140.6	136.9	138.2	137.5	136.3	136.6	136.9	137.6	19
Clocks and watches		127.6	139.3	139.2	140.7	141.9	141.1	140.8	140.8	139.9	138.6	137.0	134.2	12
Jewelry (precious metals) and jewelers' findings		178.1	181.8	182.6	187.6	191.0	190.4	189.3	191.6	194.6	190.2	182.9	177.0	14
Silverware and plated ware		217.9	225.2	224.2	226.8	226.5	223.1	221.0	223.5	218.8	215.3	210.2	205.7	13
Lighting equipment		147.4	150.6	148.4	152.7	161.7	165.4	164.1	166.6	167.3	170.2	171.7	172.3	13
Aluminum manufactures		165.8	179.3	181.5	187.7	192.1	192.0	192.2	190.1	185.4	183.0	179.9	174.0	33
Sheet-metal work, not elsewhere classified		189.3	186.2	187.8	192.0	196.4	196.9	199.0	209.9	209.1	207.1	200.3	200.8	20
Lumber and timber basic products [2]	200.8	196.9	190.0	183.6	179.4	178.3	175.0	175.6	178.4	178.5	178.6	177.3	177.3	12
Sawmills and logging camps		216.8	208.2	200.1	194.8	193.5	189.4	190.6	194.7	195.4	196.5	195.5	195.9	13
Planing and plywood mills		186.6	184.2	182.0	180.4	179.9	178.4	178.0	176.2	174.1	170.0	166.9	165.4	12

See footnotes 1 and 2, table A–5.

TABLE A–6: Indexes of Production-Worker Employment in Manufacturing Industries [1]—Continued

[1939 average=100]

Industry group and industry	1948								1947					Annual average
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1943
Durable goods—Continued														
Furniture and finished lumber products	140.5	137.8	139.8	139.7	143.4	147.8	149.2	149.1	148.3	147.1	144.8	141.9	140.1	111.7
Mattresses and bedsprings		151.1	152.3	152.0	159.4	168.8	176.7	177.1	175.8	174.9	170.3	162.3	153.5	105.9
Furniture		128.2	130.3	131.1	134.7	138.8	140.2	139.8	138.7	136.9	134.1	131.0	129.4	112.4
Wooden boxes, other than cigar		117.2	117.3	114.8	119.0	122.2	124.3	125.3	122.7	124.6	127.1	126.3	125.6	125.0
Caskets and other morticians' goods		126.5	130.5	133.5	136.4	140.6	139.6	141.4	142.2	141.5	139.6	140.6	139.2	102.4
Wood preserving		128.5	124.8	122.6	120.4	124.3	124.8	131.1	134.8	138.8	142.4	145.1	150.4	98.7
Wood, turned and shaped		128.6	134.5	130.5	133.4	136.2	133.7	131.1	133.4	132.1	128.5	127.9	128.2	107.4
Stone, clay, and glass products	157.0	153.2	156.0	154.7	153.7	153.9	150.9	151.6	154.7	154.0	152.8	152.3	151.2	122.5
Glass and glassware		155.6	163.2	164.7	165.2	165.2	161.3	164.3	167.8	168.4	168.2	166.7	165.7	139.9
Glass products made from purchased glass		124.3	123.2	122.2	123.4	124.8	123.8	125.0	127.1	125.8	122.0	120.1	120.2	113.1
Cement		156.4	154.5	152.2	150.5	149.4	150.3	149.1	150.5	151.0	151.1	152.1	151.1	111.5
Brick, tile, and terra cotta		137.5	138.0	133.8	131.1	130.1	126.9	131.4	131.4	130.6	130.2	129.8	129.4	90.5
Pottery and related products		164.4	170.2	168.9	167.2	170.2	166.9	166.0	170.3	169.0	166.0	165.2	165.9	132.9
Gypsum		136.4	134.0	132.5	132.8	134.3	133.8	132.7	134.6	132.4	128.7	124.2	123.5	91.2
Wallboard, plaster (except gypsum), and mineral wool		156.7	154.9	155.4	155.2	153.1	154.1	155.7	156.9	156.4	151.2	149.4	145.3	137.2
Lime		99.4	98.3	100.8	101.6	100.0	98.0	97.8	98.6	99.9	95.8	97.0	97.0	98.7
Marble, granite, slate, and other products		100.7	99.2	97.8	96.6	99.3	96.5	97.5	99.0	100.1	99.2	99.9	99.4	67.4
Abrasives		237.2	230.4	226.0	226.3	226.4	221.0	178.0	217.6	213.7	213.8	217.9	208.8	302.2
Asbestos products		130.9	136.0	137.1	137.5	138.2	137.4	137.8	136.3	134.1	134.4	132.0	129.9	138.2
Nondurable goods														
Textile-mill products and other fiber manufactures	111.4	108.7	113.2	113.0	113.7	114.7	114.2	113 0	112.7	111.1	109.2	106.9	105.1	108.2
Cotton manufactures, except smallwares		121.6	126.1	125.4	125.8	126.6	125.6	125.2	125.1	123.6	121.5	119.3	118.1	125.8
Cotton smallwares		95.1	99.4	102.3	103.6	105.8	105.8	103.8	101.8	98.6	97.2	95.2	93.3	126.6
Silk and rayon goods		85.4	89.0	88.3	88.2	88.1	87.6	84.9	85.5	84.4	83.5	81.6	80.2	82.2
Woolen and worsted manufactures, except dyeing and finishing		106.0	110.3	109.9	111.0	113.1	113.9	112.5	112.4	110.5	108.4	107.0	103.3	110.4
Hosiery		74.8	80.5	81.3	82.8	84.1	83.5	82.8	82.3	81.1	79.4	77.5	76.3	74.9
Knitted cloth		96.5	96.8	99.4	101.9	101.4	101.8	100.4	99.9	99.4	97.1	95.2	94.2	109.4
Knitted outerwear and knitted gloves		94.6	103.6	105.8	104.4	106.4	106.0	102.9	105.5	105.5	103.5	99.5	94.0	117.2
Knitted underwear		114.4	118.1	119.3	122.7	123.5	122.2	120.6	120.0	117.5	115.3	111.9	110.5	110.4
Dyeing and finishing textiles, including woolen and worsted		119.6	122.5	123.9	125.0	125.2	125.8	124.4	123.8	121.6	120.5	117.6	114.9	113.6
Carpets and rugs, wool		137.4	137.6	136.4	135.4	135.5	134.0	132.2	130.9	127.1	124.4	121.7	119.7	90.8
Hats, fur-felt		80.0	87.0	84.2	82.7	89.3	89.0	89.1	89.7	88.5	88.4	85.8	86.3	71.3
Jute goods, except felts		112.3	114.2	112.0	112.8	109.3	110.3	105.1	80.6	79.4	79.5	76.6	78.1	110.6
Cordage and twine		123.7	127.0	128.7	130.9	134.1	134.7	131.6	128.8	125.7	120.4	115.3	116.5	143.4
Apparel and other finished textile products	146.9	135.6	138.6	137.1	139.8	147.5	147.7	145.3	144.8	141.5	142.7	138.9	135.6	121.4
Men's clothing, not elsewhere classified		129.1	136.9	134.9	135.0	137.0	135.5	134.2	135.2	134.7	133.6	130.4	128.3	115.8
Shirts, collars, and nightwear		102.5	108.2	109.4	110.9	111.2	110.8	110.4	111.4	109.7	107.2	104.4	101.6	90.9
Underwear and neckwear, men's		98.5	107.4	108.3	110.1	112.0	110.3	106.6	108.8	106.5	102.3	101.1	97.9	96.3
Work shirts		130.9	131.4	129.2	126.4	123.8	119.0	112.0	109.8	109.4	112.1	112.4	110.7	131.3
Women's clothing, not elsewhere classified		152.7	152.1	149.4	153.7	168.3	169.5	166.4	164.4	158.0	161.5	158.0	153.9	120.6
Corsets and allied garments		90.8	96.5	98.8	102.4	106.1	107.0	104.9	104.4	103.3	100.2	96.5	93.4	88.1
Millinery		87.8	79.4	80.4	92.3	108.3	109.2	103.4	92.0	84.7	98.9	93.4	92.6	91.5
Handkerchiefs		76.8	96.6	99.2	99.8	99.6	97.9	95.7	101.1	102.2	100.9	98.3	90.6	113.1
Curtains, draperies, and bedspreads		141.2	148.9	148.8	156.0	172.1	190.5	178.0	181.3	180.9	173.7	161.4	153.9	141.9
Housefurnishings, other than curtains, etc		252.6	249.9	248.2	259.8	272.0	261.5	268.6	274.3	268.7	283.4	274.0	263.5	214.9
Textile bags		223.6	216.4	212.8	212.4	216.9	220.2	223.7	226.8	225.3	222.6	220.1	216.5	155.7
Leather and leather products [2]	110.7	108.3	107.4	103.3	107.1	114.1	115.8	114.9	115.3	114.1	113.2	112.2	111.1	98.1
Leather		94.3	95.7	94.9	95.1	98.4	100.4	100.3	100.4	100.3	100.2	99.6	98.1	92.9
Boot and shoe cut stock and findings		88.6	88.9	86.9	88.7	94.7	97.8	98.8	99.4	99.0	98.1	96.9	96.3	96.0
Boots and shoes		104.0	102.5	97.7	102.2	110.1	111.7	111.0	110.6	108.7	107.8	107.2	106.4	89.0
Leather gloves and mittens		127.8	128.8	123.9	121.9	125.4	124.9	121.9	130.1	131.8	131.5	128.1	126.8	153.7
Trunks and suitcases		159.6	159.3	158.6	160.1	166.4	168.6	159.3	170.1	177.9	172.5	162.6	153.1	161.2
Food	165.5	160.0	147.4	127.7	122.6	134.5	135.6	139.3	146.9	150.7	158.3	173.6	168.8	123.5
Slaughtering and meat packing		140.9	139.9	86.0	71.9	134.0	138.5	145.7	150.8	142.0	135.5	134.7	135.5	128.9
Butter		195.4	201.2	194.5	183.3	170.5	158.8	162.0	163.6	168.2	172.9	178.0	188.0	165.2
Condensed and evaporated milk		205.9	211.2	198.3	188.3	177.2	172.5	169.3	170.6	179.7	188.9	194.5	208.8	182.6
Ice cream		184.9	179.1	166.0	153.9	138.5	133.8	133.7	141.4	149.1	157.8	176.8	185.9	130.7
Flour		143.4	139.1	134.2	135.0	136.0	137.5	141.3	141.9	143.1	143.3	140.4	141.6	118.5
Feeds, prepared		168.6	166.4	161.5	153.9	152.0	158.7	169.4	168.4	165.3	167.7	171.2	173.1	145.0
Cereal preparations		164.5	155.2	152.6	146.4	144.7	147.8	145.0	144.3	153.7	153.6	168.0	169.7	136.0
Baking		118.9	118.0	115.4	114.3	115.4	114.1	113.1	116.0	118.1	117.9	115.5	114.5	111.0
Sugar refining, cane		134.4	115.3	111.7	109.2	123.2	127.2	116.2	126.2	131.1	129.0	131.3	131.2	105.1
Sugar, beet		62.0	60.2	54.6	46.9	48.4	56.3	91.5	179.7	225.5	226.4	102.9	90.2	86.8
Confectionery		101.2	102.9	100.5	109.5	118.3	126.2	134.1	141.2	142.7	137.2	122.6	112.8	106.7
Beverages, nonalcoholic		187.0	172.2	161.7	151.3	143.6	134.9	140.1	139.7	143.8	150.4	164.9	166.4	135.1
Malt liquors		196.1	185.0	163.9	172.4	167.0	165.5	168.2	172.4	181.3	184.6	188.4	187.9	134.1
Canning and preserving		163.8	111.7	91.7	84.3	81.2	82.1	85.5	99.1	114.4	159.8	255.7	232.7	125.4
Tobacco manufactures [2]	92.5	88.8	90.6	90.5	92.4	93.4	92.9	93.6	94.4	96.5	95.1	92.3	91.6	97.2
Cigarettes		122.4	121.2	120.7	121.1	121.1	122.1	122.6	124.5	124.0	121.7	118.7	120.0	123.8
Cigars		74.7	78.1	78.3	81.0	82.7	82.8	82.1	81.7	85.5	84.2	81.5	79.8	85.0
Tobacco (chewing and smoking) and snuff		75.6	76.1	75.9	77.0	77.3	78.3	78.9	82.1	81.3	81.8	79.8	79.3	92.5

[1] See footnotes 1 and 2, table A–5.

TABLE A–6: Indexes of Production-Worker Employment in Manufacturing Industries [1]—Continued

[1939 average=100]

Industry group and industry	1948								1947					Annual average
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1943
Nondurable goods—Continued														
Paper and allied products [2]	147.4	146.1	146.9	146.5	146.8	148.0	147.8	148.7	149.9	148.6	147.8	146.2	145.7	122.2
Paper and pulp	-------	149.5	148.2	148.5	147.8	147.9	147.3	147.4	147.2	145.7	145.3	145.2	145.0	116.2
Paper goods, other	-------	160.2	163.6	163.0	162.6	164.2	164.1	165.9	169.1	167.9	166.9	162.9	160.8	132.1
Envelopes	-------	140.9	144.0	145.8	145.6	145.7	143.9	142.0	142.6	142.5	140.6	137.4	136.0	116.6
Paper bags	-------	156.3	157.8	158.5	162.3	164.1	162.0	163.2	163.9	161.3	160.7	159.2	161.6	118.6
Paper boxes	-------	131.0	133.9	131.8	133.7	137.3	139.1	140.8	143.7	142.7	141.5	138.5	137.9	129.3
Printing, publishing, and allied industries [2]	131.8	131.1	132.3	132.0	131.8	132.8	133.5	134.0	135.7	135.4	134.6	133.2	132.3	100.8
Newspapers and periodicals	-------	123.7	123.8	123.3	122.2	122.0	121.4	121.0	122.7	122.2	121.8	121.7	120.5	93.2
Printing; book and job	-------	143.4	144.5	144.3	143.5	145.3	147.1	148.6	150.0	149.3	148.3	145.7	144.4	108.7
Lithographing	-------	118.9	118.3	117.6	119.0	119.5	121.2	121.7	125.3	125.8	124.2	123.4	124.0	96.5
Bookbinding	-------	129.5	136.3	136.2	139.2	144.5	145.1	145.9	148.8	150.3	149.3	148.1	148.7	114.1
Chemicals and allied products	203.3	195.7	198.4	198.4	201.4	203.6	204.2	204.1	205.4	204.5	203.2	199.9	195.3	254.1
Paints, varnishes, and colors	-------	180.9	180.9	179.4	177.1	179.4	182.1	179.3	178.9	177.7	176.5	175.4	173.4	135.1
Drugs, medicines, and insecticides	-------	228.6	230.6	231.1	233.3	236.9	238.3	238.5	239.2	241.3	243.7	243.6	240.5	203.6
Perfumes and cosmetics	-------	104.6	104.7	105.2	107.6	111.2	116.2	115.4	123.6	133.1	129.9	121.3	116.5	135.8
Soap	-------	146.4	144.3	142.2	142.9	163.1	166.3	167.0	167.4	168.9	165.7	161.7	157.0	117.1
Rayon and allied products	-------	132.9	132.7	131.2	131.4	131.8	131.8	130.8	131.4	130.5	130.1	128.4	126.4	111.7
Chemicals, not elsewhere classified	-------	275.8	283.5	279.8	283.2	280.8	281.0	282.8	283.3	280.9	278.9	279.0	280.8	206.7
Explosives and safety fuses	-------	325.4	316.5	304.7	303.7	306.8	303.3	301.3	300.7	298.0	293.6	291.4	290.1	1536.9
Compressed and liquefied gases	-------	251.5	253.7	250.9	252.4	250.1	246.2	249.9	248.8	244.9	243.5	249.0	253.2	197.2
Ammunition, small-arms	-------	179.8	181.1	181.6	182.5	182.8	182.2	178.7	172.7	168.7	167.2	163.5	103.8	3596.6
Fireworks	-------	189.8	211.8	219.7	210.1	203.9	221.8	213.4	243.5	249.0	249.9	214.0	177.5	2426.9
Cottonseed oil	-------	81.8	82.8	89.1	99.5	115.0	127.7	142.1	159.5	160.5	157.2	119.8	85.9	133.6
Fertilizers	-------	123.4	131.4	156.1	177.4	184.4	171.5	161.3	148.7	141.6	142.1	142.0	133.4	146.2
Products of petroleum and coal [2]	160.3	160.7	160.3	157.3	154.9	155.4	153.9	155.0	155.5	156.1	155.8	156.4	157.0	117.6
Petroleum refining	-------	159.8	159.2	156.7	155.2	155.0	153.1	153.5	153.7	153.4	153.5	154.9	156.3	112.4
Coke and byproducts	-------	147.0	145.9	143.2	136.8	141.4	139.6	140.6	138.3	138.2	136.5	135.1	134.7	117.6
Paving materials	-------	111.0	110.3	97.1	92.7	75.3	73.2	83.2	109.4	138.1	137 4	140.0	133.9	87.0
Roofing materials	-------	215.5	218.2	213.2	214.6	215.3	217.5	222.7	226.2	228.0	227.7	226.8	224.9	161.2
Rubber products [2]	160.9	157.5	161.6	161.1	163.8	168.9	172.0	173.5	175.3	174.0	171.7	168.1	167.9	160.1
Rubber tires and inner tubes	-------	167.6	169.4	168.5	170.7	177.7	182.4	185.5	187.8	188.7	188.0	185.2	193.0	166.1
Rubber boots and shoes	-------	139.4	146.9	146.4	149.0	152.4	153.8	151.5	151.4	147.9	146.1	141.6	127.2	160.8
Rubber goods, other	-------	152.1	157.5	157.5	161.9	165.3	166.9	167.4	169.1	166.0	162.0	157.8	153.5	154.1
Miscellaneous industries	180.1	173.6	175.4	176.6	178.4	182.6	181.9	180.9	187.5	190.4	187.5	182.8	177.7	181.7
Instruments (professional and scientific), and fire-control equipment	-------	246.1	243.4	242.8	244.1	244.6	245.2	245.3	248.1	246.1	247.4	245.0	243.4	769.6
Photographic apparatus	-------	219.7	215.6	214.1	217.1	219.8	220.9	220.4	221.8	219.5	218.8	216.1	216.5	200.0
Optical instruments and ophthalmic goods	-------	199.9	214.6	224.1	226.9	229.1	230.0	233.6	235.4	232.1	231.6	231.6	231.8	280.3
Pianos, organs, and parts	-------	163.1	172.9	175.2	170.5	189.7	201.5	215.2	226.3	228.6	223.8	211.4	187.2	156.2
Games, toys, and dolls	-------	218.1	213.8	210.3	210.7	201.2	189.9	175.0	201.3	226.9	221.4	213.9	202.1	99.7
Buttons	-------	111.2	114.8	114.2	116.3	122.6	119.4	118.7	119.1	113.0	107.7	103.4	101.9	116.6
Fire extinguishers	-------	270.3	269.3	260.9	266.8	258.6	249.3	253.5	268.0	269.5	273.2	277.6	277.3	913.3

[1] See footnotes 1 and 2, table A–5.

TABLE A–7: Indexes of Production-Worker Weekly Pay Rolls in Manufacturing Industries [1]

[1939 average=100]

Industry group and industry	1948								1947					Annual average
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1943
All manufacturing	374.6	360.1	359.0	346.7	347.1	358.4	354.1	358.7	365.7	353.4	350.1	345.3	331.5	334.4
Durable goods	418.7	403.1	401.3	390.8	393.4	402.0	393.1	403.1	411.0	395.0	389.9	282.2	366.8	469.1
Nondurable goods	331.4	318.1	317.7	303.6	301.9	315.7	316.0	315.3	321.4	312.8	311.2	309.2	297.0	202.1
Durable goods														
Iron and steel and their products	361.1	336.9	340.5	334.4	329.6	340.8	337.6	341.9	345.8	335.1	331.6	327.7	316.8	311.9
Blast furnaces, steel works, and rolling mills	-------	269.9	268.4	265.4	253.0	260.9	257.5	261.2	257.8	255.1	251.9	254.5	254.2	222.2
Gray-iron and semisteel castings	-------	377.8	400.1	374.3	394.6	421.7	414.9	416.4	420.7	399.3	406.7	403.0	384.1	261.2
Malleable-iron castings	-------	448.8	468.1	460.3	453.0	469.7	467.6	480.1	479.8	459.6	448.7	425.9	392.1	278.8
Steel castings	-------	440.5	469.5	454.2	453.2	456.8	442.3	442.1	443.3	429.5	423.1	414.2	396.9	493.2
Cast-iron pipe and fittings	-------	411.6	422.0	401.4	370.0	397.5	392.5	394.4	404.0	381.4	382.3	366.6	352.5	177.2
Tin cans and other tinware	-------	353.8	310.8	286.1	274.9	289.8	302.4	320.0	336.7	320.7	331.9	349.2	334.9	161.1
Wire drawn from purchased rods	-------	242.8	243.3	249.8	255.3	269.1	268.7	271.6	280.3	270.1	267.6	259.5	254.3	255.5
Wirework	-------	315.1	295.7	298.2	302.0	316.4	309.0	320.5	321.9	297.4	289.0	290.1	271.6	202.1
Cutlery and edge tools	-------	335.7	343.6	357.8	364.6	370.6	377.2	381.9	386.3	384.1	372.2	359.1	333.3	278.1

[1] See footnotes 1 and 2, table A–5

TABLE A–7: Indexes of Production-Worker Weekly Pay Rolls in Manufacturing Industries [1]—Con.

[1939 average=100]

Industry group and industry	1948								1947					Annual average
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1943
Durable goods—Continued														
Iron and steel and their products—Continued														
Tools (except edge tools, machine tools, files, and saws)		358.7	370.8	366.6	372.4	378.4	379.0	381.0	381.0	363.0	352.6	347.9	329.6	334.1
Hardware		303.8	318.6	325.8	342.2	355.1	353.5	352.5	345.9	328.7	321.2	308.4	291.8	245.8
Plumbers' supplies		316.7	329.0	324.0	322.2	329.0	320.3	321.8	331.9	324.1	306.8	291.6	278.6	161.7
Stoves, oil burners, and heating equipment, not elsewhere classified		359.1	359.9	352.5	345.4	368.6	387.2	395.8	422.7	404.5	417.6	399.3	355.9	210.9
Steam and hot-water heating apparatus and steam fittings		397.2	409.5	406.0	393.8	416.5	425.1	403.7	430.9	419.4	403.0	394.1	365.8	360.6
Stamped and enameled ware and galvanizing		428.9	439.3	440.6	439.8	447.0	447.4	456.0	472.8	453.7	445.2	437.1	415.0	307.0
Fabricated structural and ornamental metal-work		329.0	345.2	345.7	340.6	343.4	335.4	339.7	360.1	350.5	347.7	339.4	339.3	364.3
Metal doors, sash, frames, molding, and trim		292.9	309.1	288.6	283.9	292.2	276.9	296.7	313.2	298.1	290.0	280.3	266.4	292.6
Bolts, nuts, washers, and rivets		401.0	412.8	408.2	416.7	422.4	406.0	393.1	406.0	391.5	386.0	369.4	367.3	382.0
Forgings, iron and steel		449.6	454.1	443.7	467.6	487.5	496.2	502.4	506.9	484.8	485.5	456.3	419.0	507.9
Wrought pipe, welded and heavy-riveted		473.0	467.3	443.1	437.7	455.3	433.2	457.2	472.7	443.1	427.3	396.6	388.7	610.9
Screw-machine products and wood screws		426.8	436.9	445.4	452.0	456.5	452.1	446.1	442.9	421.7	424.3	413.4	402.6	560.4
Steel barrels, kegs, and drums		301.4	313.3	302.6	298.1	302.0	300.5	333.7	334.0	308.6	299.6	325.6	317.6	247.0
Firearms		952.7	945.9	915.6	906.0	911.3	872.2	846.7	835.0	796.1	780.3	766.9	734.8	2934.8
Electrical machinery	454.8	436.5	439.6	431.6	444.3	459.1	465.1	471.0	481.2	471.9	464.6	450.5	428.1	488.0
Electrical equipment		405.7	406.7	398.1	408.1	419.6	424.0	430.6	434.3	423.9	417.8	411.0	393.7	475.6
Radios and phonographs		456.2	458.0	451.4	468.5	488.4	495.6	507.3	542.9	539.6	533.2	501.9	459.7	505.0
Communication equipment		517.8	534.1	530.0	551.2	578.6	593.7	586.4	604.6	597.8	584.5	551.1	523.8	538.2
Machinery, except electrical	477.8	469.5	480.7	466.4	463.8	475.2	471.9	473.8	479.9	459.6	458.0	451.4	434.5	443.7
Machinery and machine-shop products		489.3	500.7	491.0	493.6	496.4	495.5	494.9	500.7	481.5	480.0	477.9	462.1	501.8
Engines and turbines		584.5	601.4	617.6	611.7	632.3	622.1	625.5	607.4	601.9	576.0	591.3	597.2	849.4
Tractors		366.4	355.5	285.4	248.9	353.8	351.9	354.3	347.0	336.9	333.1	322.2	306.5	256.7
Agricultural machinery, excluding tractors		573.3	595.4	571.2	571.9	576.8	550.5	534.9	522.7	482.5	504.6	494.1	471.5	298.6
Machine tools		238.7	242.9	240.7	240.2	249.2	254.4	250.1	262.2	253.3	257.5	257.4	253.6	503.9
Machine-tool accessories		361.1	383.5	389.9	392.6	388.9	398.0	398.6	397.7	380.2	379.0	380.5	362.9	671.1
Textile machinery		437.9	459.1	444.8	441.3	443.2	420.9	417.9	417.4	396.3	381.7	366.0	330.2	230.1
Pumps and pumping equipment		585.2	596.5	610.3	610.0	617.7	627.0	622.0	628.1	607.7	611.1	627.1	609.6	761.8
Typewriters		318.7	325.2	325.0	336.8	347.5	357.6	366.1	369.6	358.2	342.3	321.6	309.6	143.8
Cash registers; adding, and calculating machines		506.2	505.9	489.4	504.7	499.9	489.0	491.9	490.7	463.5	455.8	441.9	405.2	341.6
Washing machines, wringers, and driers, domestic		438.5	480.9	454.2	465.3	454.0	470.4	464.3	484.2	449.7	430.5	400.0	393.3	301.5
Sewing machines, domestic and industrial		458.5	444.2	428.0	409.9	414.5	404.0	397.9	398.8	382.1	369.9	348.2	323.2	282.3
Refrigerators and refrigeration equipment		489.3	508.9	472.3	450.4	454.7	433.7	479.2	465.9	434.3	446.6	426.6	408.7	264.5
Transportation equipment, except automobiles	547.7	552.4	561.2	566.4	601.4	600.4	593.3	611.2	600.2	555.1	541.5	509.8	492.4	3080.3
Locomotives		907.3	913.7	916.4	928.1	908.6	869.2	883.0	900.3	863.1	870.1	875.3	811.9	1107.3
Cars, electric- and steam-railroad		467.9	492.5	478.5	483.8	490.3	479.5	500.6	522.4	503.5	493.6	468.8	436.3	457.9
Aircraft and parts, excluding aircraft engines		661.1	649.2	634.2	695.2	675.9	667.3	657.4	668.7	653.8	663.8	623.3	637.6	3496.3
Aircraft engines		533.1	517.5	493.5	481.0	473.9	493.4	482.9	503.5	479.2	499.9	501.3	486.7	4528.7
Shipbuilding and boatbuilding		305.3	321.7	345.7	373.6	383.7	385.4	416.7	378.9	316.6	289.9	262.0	241.8	3594.7
Motorcycles, bicycles, and parts		300.2	345.7	370.5	418.2	426.6	420.6	414.5	448.2	441.3	430.8	404.9	392.8	253.6
Automobiles	422.1	423.3	380.9	362.6	386.2	396.5	357.6	408.7	427.7	395.6	385.8	380.6	345.1	321.2
Nonferrous metals and their products	379.3	361.2	368.1	362.5	368.3	377.1	372.9	372.7	377.8	367.3	359.3	349.5	335.3	354.5
Smelting and refining, primary, of nonferrous metals		338.1	329.3	321.6	314.1	307.2	303.7	303.1	299.9	300.3	296.0	302.5	292.4	353.9
Alloying; and rolling and drawing of nonferrous metals, except aluminum		283.9	277.9	268.9	271.7	283.5	273.2	273.4	271.9	263.7	260.6	257.6	250.9	353.4
Clocks and watches		304.1	331.7	327.4	336.8	339.1	333.4	326.2	333.3	330.5	320.1	311.7	293.1	238.4
Jewelry (precious metals) and jewelers' findings		345.2	372.0	362.4	377.7	391.8	396.2	383.4	415.6	403.6	393.4	360.2	321.2	211.8
Silverware and plated ware		481.1	526.7	522.4	529.4	543.3	525.6	520.5	535.5	507.4	496.2	480.6	441.7	212.8
Lighting equipment		317.8	305.5	293.3	308.3	328.4	333.7	337.8	343.0	333.9	333.8	325.9	318.5	240.4
Aluminum manufactures		315.1	338.0	347.0	356.8	362.0	366.8	371.3	364.7	351.7	345.5	325.5	311.8	591.6
Sheet-metal work, not elsewhere classified		420.9	420.7	413.2	417.8	433.0	429.7	436.8	459.8	438.0	441.6	419.0	420.0	357.6
Lumber and timber basic products [2]	538.8	511.7	497.3	461.1	433.4	427.6	417.2	413.5	431.8	429.1	427.2	427.4	429.7	215.1
Sawmills and logging camps		575.6	555.6	508.4	471.0	466.4	452.4	450.3	473.4	476.2	476.2	480.4	485.2	238.3
Planing and plywood mills		456.3	456.1	445.1	435.4	424.7	422.2	417.1	421.1	400.9	395.0	379.5	376.5	197.8
Furniture and finished lumber products	339.7	320.4	326.0	325.6	333.0	349.2	350.2	352.2	355.7	343.0	338.8	324.3	311.6	183.9
Mattresses and bedsprings		330.5	324.9	318.0	336.4	363.2	385.0	388.3	395.0	372.6	378.7	356.0	323.0	165.7
Furniture		296.5	304.2	307.2	314.6	330.9	333.6	333.4	334.3	323.2	315.0	297.9	284.7	185.3
Wooden boxes, other than cigar		297.3	304.3	281.4	285.2	300.1	292.2	304.2	312.1	301.9	308.8	305.0	304.7	215.8
Caskets and other morticians' goods		255.1	264.7	270.3	281.0	295.6	291.0	294.9	299.6	287.3	281.4	283.4	271.6	159.3
Wood preserving		348.6	334.5	328.6	312.6	310.5	292.1	330.4	347.2	353.0	384.2	393.7	404.2	181.9
Wood, turned and shaped		297.1	301.5	303.9	310.4	317.4	307.3	298.3	305.3	290.8	287.8	281.2	281.4	175.5
Stone, clay, and glass products	359.4	335.5	347.1	343.4	337.9	336.6	321.4	322.9	335.7	331.2	328.2	320.2	315.5	189.1
Glass and glassware		316.8	348.5	352.5	355.3	358.2	340.0	343.4	356.5	357.2	351.2	342.8	334.1	208.3
Glass products made from purchased glass		257.0	265.9	264.5	259.9	267.6	267.0	271.6	287.1	269.4	264.0	251.5	246.4	165.9
Cement		328.7	323.5	314.3	297.2	287.3	282.8	284.7	291.3	294.0	294.7	298.3	297.0	156.5
Brick, tile, and terra cotta		335.1	329.9	320.8	305.6	297.1	279.0	296.9	301.9	296.7	300.2	294.1	289.1	135.8
Pottery and related products		336.6	355.2	351.1	348.7	352.9	337.4	337.8	354.4	349.8	342.7	326.5	330.4	191.9

See footnotes 1 and 2, table A–5.

TABLE A–7: Indexes of Production-Worker Weekly Pay Rolls in Manufacturing Industries [1]—Co

[1939 average=100]

Industry group and industry	1948								1947					Ann ave
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	194
Durable goods—Continued														
Stone, clay, and glass products—Continued														
Gypsum		307.5	306.1	303.7	298.6	285.4	278.4	283.0	290.2	284.5	278.1	258.3	260.4	18
Wallboard, plaster (except gypsum), and mineral wool		426.5	412.9	403.8	406.6	390.1	375.5	374.1	386.5	381.5	368.4	357.8	353.9	22
Lime		268.9	270.7	273.3	273.3	262.1	243.8	249.5	256.9	259.5	258.9	245.5	243.3	17
Marble, granite, slate, and other products		184.1	185.0	183.2	176.6	179.3	169.5	173.5	183.3	175.9	183.5	180.9	176.4	9
Abrasives		488.4	502.4	490.6	474.9	487.0	457.4	363.2	462.1	418.2	408.0	498.2	375.6	48
Asbestos products		327.2	334.3	329.9	328.9	327.0	322.3	325.0	318.7	313.6	305.6	299.2	301.7	25
Nondurable goods														
Textile-mill products and other fiber manufactures	298.0	285.4	304.6	303.8	307.1	315.6	310.6	303.0	302.0	288.2	271.8	262.9	246.2	17
Cotton manufactures, except smallwares		341.3	365.9	369.7	374.7	385.1	377.0	378.7	376.4	362.1	329.1	317.4	305.7	21
Cotton smallwares		226.0	238.0	238.3	243.0	249.1	249.3	243.8	234.1	215.1	213.6	210.6	195.4	21
Silk and rayon goods		257.1	271.5	268.6	267.4	267.8	262.4	252.6	248.1	236.6	227.6	220.2	208.5	13
Woolen and worsted manufactures, except dyeing and finishing		294.9	311.5	307.9	308.6	322.1	321.1	292.0	294.4	276.6	270.4	268.5	233.6	19
Hosiery		171.1	185.6	183.6	189.2	197.6	190.5	188.8	193.5	186.4	177.2	166.4	158.6	10
Knitted cloth		223.9	223.2	223.1	237.1	243.3	242.6	236.5	231.6	221.7	214.4	207.8	204.1	17
Knitted outerwear and knitted gloves		212.0	242.2	247.6	242.8	249.9	250.3	234.3	241.6	243.0	237.0	215.3	200.6	19
Knitted underwear		283.4	301.8	303.4	320.3	323.7	311.0	306.6	306.9	295.4	282.8	274.3	258.0	18
Dyeing and finishing textiles, including woolen and worsted		278.4	297.8	299.0	305.6	308.8	311.2	304.1	298.1	279.8	271.3	269.5	248.7	17
Carpets and rugs, wool		342.1	345.4	332.8	324.2	327.9	321.8	316.8	311.6	297.6	288.7	276.5	246.3	14
Hats, fur-felt		174.3	197.4	184.6	176.4	197.5	202.2	195.8	202.1	181.9	185.9	177.2	171.4	12
Jute goods, except felts		272.4	277.5	272.2	275.9	264.2	265.7	250.1	175.4	170.1	168.7	163.7	162.0	19
Cordage and twine		287.6	306.5	303.4	311.4	330.4	337.6	330.6	320.0	300.6	282.0	258.6	256.0	24
Apparel and other finished textile products	343.4	303.6	303.6	297.9	306.5	343.2	345.2	337.0	327.3	304.8	320.5	303.8	288.4	18
Men's clothing, not elsewhere classified		294.1	312.9	311.5	317.1	324.8	316.4	313.4	309.5	301.5	303.5	284.9	264.8	17
Shirts, collars, and nightwear		246.6	258.5	266.8	274.6	279.7	272.0	273.0	281.3	266.0	258.9	243.2	225.5	14
Underwear and neckwear, men's		269.6	289.1	296.7	297.0	313.7	300.0	292.0	304.0	292.9	280.2	261.3	240.7	16
Work shirts		323.5	330.9	325.8	316.1	305.6	284.6	247.5	248.2	253.1	262.0	266.9	263.6	22
Women's clothing, not elsewhere classified		326.6	310.7	299.3	307.1	376.4	387.1	374.8	355.9	319.3	349.5	334.7	323.1	18
Corsets and allied garments		197.8	210.8	213.0	229.1	241.6	237.7	234.5	230.5	226.8	219.0	205.4	194.7	13
Millinery		166.2	133.2	127.9	171.3	212.5	236.0	204.4	157.4	123.6	195.2	173.1	171.2	12
Handkerchiefs		180.3	231.0	239.1	251.5	259.4	243.4	222.5	251.2	260.4	251.4	239.4	210.6	18
Curtains, draperies, and bedspreads		316.8	339.2	334.8	348.5	397.0	431.4	419.1	424.7	422.2	412.1	371.9	334.7	23
Housefurnishings, other than curtains, etc		576.8	587.3	544.2	584.6	609.2	572.9	597.8	653.1	590.1	632.2	604.6	573.5	37
Textile bags		493.2	470.8	464.8	446.4	449.3	461.7	481.1	492.9	484.8	472.6	458.8	443.6	23
Leather and leather products [2]	249.0	236.9	233.4	215.4	227.1	251.7	262.5	258.7	259.6	252.5	251.8	248.1	235.8	15
Leather		203.6	205.2	201.1	197.9	206.4	216.4	214.8	217.5	213.8	212.9	212.0	202.5	14
Boot and shoe cut stock and findings		178.6	179.9	169.6	173.4	187.9	198.6	201.4	202.6	190.3	189.6	191.4	189.8	14
Boots and shoes		231.1	225.3	202.8	219.5	249.7	261.0	258.3	256.0	246.7	246.6	243.7	230.9	14
Leather gloves and mittens		267.4	273.6	256.9	241.3	252.8	252.2	245.3	262.4	264.1	267.5	253.5	242.3	23
Trunks and suitcases		339.5	339.5	339.8	347.2	364.1	366.9	321.6	369.3	406.0	381.8	335.9	309.1	24
Food	350.2	353.5	330.1	281.3	267.4	285.8	288.5	296.6	321.9	323.5	332.8	356.1	349.3	18
Slaughtering and meat packing		305.9	315.4	211.3	179.9	276.6	263.3	304.2	338.9	317.4	271.7	271.9	270.0	18
Butter		429.5	429.8	407.2	381.0	348.2	332.7	330.3	342.2	346.0	353.4	364.8	391.3	23
Condensed and evaporated milk		506.3	520.3	477.9	438.1	403.0	388.1	369.8	364.0	377.8	402.5	419.8	446.0	29
Ice cream		363.2	341.5	311.3	286.4	261.3	250.9	248.0	258.5	269.9	288.5	326.2	346.0	17
Flour		343.5	317.3	294.0	285.1	275.8	298.3	305.9	319.4	336.9	336.4	334.7	336.1	18
Feeds, prepared		395.2	389.0	367.4	337.1	329.6	314.7	379.0	381.4	346.9	358.6	382.9	364.1	23
Cereal preparations		374.8	353.7	333.6	313.0	297.8	322.2	307.8	306.3	313.7	304.4	337.5	361.2	22
Baking		247.6	245.4	235.1	227.6	227.1	234.1	221.5	229.2	227.8	230.8	223.2	218.4	15
Sugar refining, cane		312.0	243.4	227.9	229.3	248.4	232.3	216.9	248.9	302.3	279.1	278.7	284.2	15
Sugar, beet		128.0	123.0	111.8	96.7	98.9	126.7	188.0	392.8	516.8	464.0	214.3	286.7	11
Confectionery		228.7	231.1	210.4	241.1	260.1	275.6	295.3	326.6	325.1	312.2	271.3	233.4	15
Beverages, nonalcoholic		342.0	304.2	277.0	257.9	241.0	226.7	237.1	236.3	240.0	258.7	295.6	298.0	16
Malt liquors		391.8	351.0	299.9	316.0	293.0	289.9	289.4	307.7	326.8	344.1	370.3	365.1	18
Canning and preserving		421.2	282.9	234.2	216.9	204.6	216.5	216.2	250.2	265.7	437.9	683.8	653.7	21
Tobacco manufactures [3]	218.3	205.5	205.8	201.3	205.7	204.6	195.7	210.5	219.8	216.3	214.5	205.3	203.0	15
Cigarettes		270.0	263.1	253.1	254.3	246.5	219.2	259.6	267.9	253.3	252.8	243.7	248.5	17
Cigars		171.1	175.8	175.1	182.7	186.6	189.4	188.2	196.7	201.7	196.4	185.4	179.4	14
Tobacco (chewing and smoking) and snuff		164.1	166.7	161.8	161.6	159.6	162.2	161.2	175.8	169.0	178.1	177.0	169.9	13
Paper and allied products [3]	349.6	341.7	337.8	331.1	325.7	330.8	328.9	328.0	334.0	325.9	320.5	315.5	307.2	18
Paper and pulp		358.9	347.7	343.2	333.3	335.6	333.8	330.3	332.5	325.0	322.6	322.0	317.3	18
Paper goods, other		355.3	358.4	355.0	350.7	354.2	352.9	355.1	362.4	352.7	344.4	334.2	313.8	16
Envelopes		272.9	284.0	283.3	282.1	283.7	282.8	278.0	284.1	281.5	279.8	273.7	258.8	16
Paper bags		380.0	364.4	355.4	365.3	373.7	357.8	368.1	370.2	347.4	350.0	333.9	337.6	18
Paper boxes		294.9	304.8	290.4	292.5	305.4	307.1	309.1	321.9	314.5	304.2	291.5	280.1	18
Printing, publishing, and allied industries [3]	264.8	260.1	264.9	262.2	259.5	258.5	254.7	255.3	263.1	257.2	252.8	249.7	240.0	12
Newspapers and periodicals		235.5	238.1	236.5	234.6	229.2	224.6	218.9	230.0	224.0	221.6	221.6	214.0	11
Printing, book and job		296.0	299.3	296.7	291.0	292.5	290.9	295.9	297.8	292.5	285.8	279.3	267.3	13
Lithographing		223.5	230.3	224.1	221.4	227.2	219.0	224.0	237.1	236.1	226.2	225.9	215.7	12
Bookbinding		290.1	310.0	302.9	304.0	313.4	307.7	315.3	326.6	325.1	325.4	322.9	311.9	17

[1] See footnotes 1 and 2, table A–5.

TABLE A–7: Indexes of Production-Worker Weekly Pay Rolls in Manufacturing Industries [1]—Con.

[1939 average = 100]

Industry group and industry	1948								1947					Annual average
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1943
Nondurable goods—Continued														
Chemicals and allied products	450.6	430.2	432.2	422.5	422.1	425.1	425.6	426.7	424.1	416.4	409.6	403.1	390.2	422.5
Paints, varnishes, and colors	-------	357.3	349.7	343.9	329.4	332.9	338.5	332.6	329.8	327.4	318.6	315.0	312.7	197.2
Drugs, medicines, and insecticides	-------	475.7	485.7	481.5	479.9	487.6	489.2	490.7	488.5	489.9	499.1	484.7	469.7	286.3
Perfumes and cosmetics	-------	205.0	213.2	209.7	215.1	222.0	231.2	230.9	240.5	265.3	250.1	228.2	211.2	180.6
Soap	-------	331.9	329.8	322.9	321.8	359.0	376.4	379.3	381.3	371.0	357.6	351.6	325.0	174.5
Rayon and allied products	-------	288.9	279.7	275.1	274.6	271.9	270.2	268.6	265.9	260.5	257.8	259.9	252.2	168.2
Chemicals, not elsewhere classified	-------	573.1	585.9	563.2	564.8	558.6	559.2	561.3	555.8	540.8	529.8	527.3	527.0	336.9
Explosives and safety fuses	-------	657.7	638.4	592.0	561.5	585.0	587.8	580.2	565.0	566.2	542.8	545.6	539.4	2361.8
Compressed and liquefied gases	-------	517.0	504.3	491.7	483.7	473.6	475.5	465.0	459.6	458.0	445.6	455.3	448.1	325.3
Ammunition, small-arms	-------	419.8	410.3	404.1	398.8	396.8	388.7	380.5	411.9	398.0	393.3	381.4	206.5	6734.4
Fireworks	-------	505.7	571.3	594.9	572.5	625.8	610.2	591.6	633.8	711.6	747.3	577.7	447.7	5963.9
Cottonseed oil	-------	229.6	227.8	245.9	270.2	316.4	338.0	397.4	448.4	448.7	443.1	315.8	221.6	230.4
Fertilizers	-------	361.0	377.3	428.3	482.9	492.3	439.6	433.4	393.0	362.5	373.9	390.9	354.5	272.2
Products of petroleum and coal [2]	358.2	353.4	342.2	335.8	316.7	320.0	315.4	318.1	313.3	309.5	301.8	307.5	302.1	184.3
Petroleum refining	-------	344.9	330.8	326.2	310.9	306.6	302.1	303.9	300.4	295.9	286.6	294.4	289.4	176.7
Coke and byproducts	-------	329.7	330.1	320.6	287.3	314.6	312.3	309.8	294.8	292.7	288.1	280.0	285.6	183.4
Paving materials	-------	261.2	249.2	222.8	206.5	173.1	160.6	168.2	224.8	268.8	295.9	297.9	273.2	144.8
Roofing materials	-------	531.9	523.3	508.5	495.6	502.7	500.7	508.3	535.7	526.4	523.1	510.5	502.5	267.2
Rubber products [2]	347.2	329.1	330.2	318.9	312.8	320.6	337.2	354.9	373.6	361.4	354.4	348.3	337.6	263.9
Rubber tires and inner tubes	-------	329.8	322.0	305.7	286.4	292.4	315.4	344.4	365.6	362.4	354.7	355.3	355.5	265.7
Rubber boots and shoes	-------	321.7	329.7	328.1	333.9	347.0	345.0	342.8	367.1	322.4	331.7	314.4	268.4	268.8
Rubber goods, other	-------	330.1	343.7	337.7	347.1	356.2	366.2	368.3	379.9	362.2	352.3	338.3	321.5	255.8
Miscellaneous industries	397.4	373.8	386.1	384.2	382.6	394.0	393.9	388.2	405.1	403.9	394.1	378.2	355.9	322.7
Instruments (professional and scientific), and fire-control equipment	-------	484.6	488.8	492.6	494.2	489.3	487.1	507.5	499.2	480.8	478.9	469.3	460.3	1356.9
Photographic apparatus	-------	441.5	436.3	431.0	416.2	422.3	424.2	418.1	421.1	416.8	405.1	394.3	385.1	311.5
Optical instruments and ophthalmic goods	-------	390.9	419.6	426.7	438.1	444.8	446.3	452.3	458.5	445.3	443.5	442.3	426.5	439.0
Pianos, organs, and parts	-------	337.9	361.1	367.8	357.9	396.0	421.1	455.5	513.4	500.1	475.6	460.2	384.8	295.1
Games, toys, and dolls	-------	510.3	508.2	496.7	487.6	463.7	450.1	399.7	469.5	525.9	518.7	482.3	431.4	169.7
Buttons	-------	253.7	271.6	269.4	269.4	284.3	285.5	275.7	280.8	262.5	245.8	230.2	220.7	204.1
Fire extinguishers	-------	570.0	592.8	563.4	575.5	541.0	523.2	546.8	520.4	560.6	555.4	558.9	583.7	1622.9

[1] See footnotes 1 and 2, table A–5.

TABLE A–8: Estimated Number of Employees in Selected Nonmanufacturing Industries [1]

[In thousands]

Industry group and industry	1948								1947					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1943	1939
Mining: [2] [3]															
Coal:															
Anthracite	77.6	76.1	77.4	76.4	76.9	77.4	76.6	76.2	76.5	76.2	76.2	76.0	76.7	78.4	83.6
Bituminous	407	378	407	405	296	401	397	404	402	399	397	394	390	419	372
Metal	88.4	91.7	92.8	91.4	91.7	91.4	90.2	89.7	89.8	89.4	88.7	89.6	91.0	112.7	92.6
Iron	33.8	33.7	33.7	32.7	32.5	31.5	31.0	30.9	31.3	32.0	32.4	32.4	32.7	35.3	21.1
Copper	26.6	26.6	26.7	26.5	26.8	26.9	27.0	26.9	26.6	26.1	25.8	25.7	25.7	33.3	25.0
Lead and zinc	12.0	15.1	16.3	16.4	16.3	16.3	16.3	15.7	15.6	15.4	14.9	15.5	16.5	21.6	16.3
Gold and silver	8.1	8.3	8.3	8.1	8.5	8.7	8.7	8.6	8.5	8.1	8.0	8.2	8.3	7.7	26.0
Miscellaneous	8.0	8.0	7.9	7.7	7.7	7.9	7.8	7.7	7.9	7.8	7.6	7.7	7.9	14.8	4.2
Quarrying and nonmetallic	87.4	86.8	86.8	85.1	83.9	80.0	76.8	79.9	83.9	86.4	87.3	88.1	88.9	80.9	68.5
Crude petroleum and natural gas production [4]	137.1	136.9	133.5	128.7	127.2	127.2	127.1	126.4	126.3	126.4	127.1	128.7	131.0	103.2	114.4
Transportation and public utilities:															
Class I steam railroads [5]	1,354	1,362	1,352	1,321	1,258	1,316	1,311	1,318	1,331	1,340	1,357	1,364	1,381	1,355	988
Street railways and busses [6]	247	246	249	249	249	249	249	250	249	249	249	251	253	227	194
Telephone	647	643	633	630	630	627	623	620	620	614	609	613	616	402	318
Telegraph [7]	35.1	36.0	36.1	36.3	36.9	36.9	36.8	36.6	36.7	36.6	36.9	37.6	37.8	46.9	37.6
Electric light and power	286	283	279	274	273	271	269	268	269	268	267	268	269	211	244
Service:															
Hotels (year-round)	370	374	379	377	377	375	377	378	381	378	380	379	379	344	323
Power laundries [3]	233	239	238	233	232	231	230	235	237	238	241	243	245	252	196
Cleaning and dyeing [3]	89.7	92.6	94.7	93.4	92.5	90.0	86.8	88.9	91.0	92.7	95.6	94.3	93.1	78.0	58.2

[1] Unless otherwise noted, includes all nonsupervisory employees and working supervisors. Data for the three most recent months are subject to revision without notation. Revised data for earlier months are identified by an asterisk.

[2] Includes production and related workers only.

[3] Estimates have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 benchmark levels, thereby providing consistent series.

[4] Does not include well drilling or rig building.

[5] Includes all employees at middle of month. Excludes employees of switching and terminal companies. Class I steam railroads include those with over $1,000,000 annual revenue. Source: Interstate Commerce Commission.

[6] Includes private and municipal street-railway companies, and affiliated, subsidiary, or successor trolley-bus and motor-bus companies.

[7] Includes all land-line employees except those compensated on a commission basis. Excludes general and divisional headquarters personnel, trainees in school, and messengers.

TABLE A–9: Indexes of Employment in Selected Nonmanufacturing Industries [1]

[1939 average=100]

Industry group and industry	1948								1947					Annual average
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1948
Mining: [2] [3]														
Coal:														
Anthracite	92.8	91.1	92.6	91.4	91.9	92.6	91.6	91.1	91.5	91.2	91.2	91.0	91.7	92.
Bituminous	109.5	101.7	109.6	108.9	79.7	108.0	106.8	108.7	108.3	107.4	106.8	106.0	105.0	112.
Metal	95.5	99.1	100.2	98.7	99.0	98.7	97.4	96.9	97.0	96.5	95.8	96.8	98.3	121.
Iron	159.9	159.6	159.6	155.0	153.7	149.4	146.8	146.5	148.0	151.3	153.3	153.6	154.6	167.
Copper	106.5	106.6	106.9	106.0	107.2	107.9	108.2	107.5	106.6	104.4	103.1	103.0	102.8	123.
Lead and zinc	74.0	92.6	100.1	100.6	100.4	100.2	99.9	96.2	95.8	94.8	91.8	95.5	101.4	122.
Gold and silver	30.9	32.0	31.9	31.3	32.5	33.3	33.4	33.1	32.5	31.3	30.9	31.5	31.8	29.
Miscellaneous	190.0	191.3	188.6	182.9	182.8	189.1	187.0	183.0	187.2	185.7	181.6	184.6	188.3	392.
Quarrying and nonmetallic	127.7	126.7	126.8	124.2	122.5	116.8	112.2	116.7	122.6	126.2	127.6	128.7	129.8	118.
Crude petroleum and natural gas production [4]	119.8	119.7	116.7	112.5	111.2	111.1	111.1	110.5	110.4	110.5	111.1	112.5	114.5	90.
Transportation and public utilities:														
Class I steam railroads [5]	137.1	137.9	136.9	133.8	127.3	133.3	132.7	133.4	134.8	135.7	137.4	138.1	139.8	127.
Street railways and busses [6]	127.5	127.2	128.3	128.5	128.3	128.7	128.6	129.2	128.6	128.7	128.8	129.6	130.7	117.
Telephone	203.7	202.5	199.4	198.4	198.3	197.4	196.2	195.0	195.0	193.3	191.6	192.9	193.8	126.
Telegraph [7]	93.3	95.7	96.0	96.3	97.9	98.2	97.8	97.2	97.6	97.2	98.1	99.8	100.5	124.
Electric light and power	117.1	115.7	114.0	112.3	111.7	110.9	110.3	109.8	110.3	109.7	109.4	109.9	110.2	86.
Trade: [8]														
Wholesale	117.0	116.2	115.3	114.5	114.8	115.3	116.1	116.3	117.1	116.5	115.5	113.3	112.2	96.
Retail	111.2	111.9	113.6	113.1	112.8	113.8	111.8	114.4	130.2	119.8	115.8	112.4	110.0	99.
Food	112.3	113.8	115.5	116.3	116.1	116.7	113.9	114.4	117.4	116.1	115.0	112.6	114.7	106.
General merchandise	120.6	121.3	124.8	123.7	123.4	124.5	122.9	129.4	175.5	143.6	131.5	122.8	115.7	110.
Apparel	105.1	107.9	115.4	115.2	114.6	116.8	108.2	111.5	136.7	124.0	119.4	113.5	103.4	110.
Furniture and housefurnishings	90.2	90.6	92.0	91.9	91.6	91.9	91.0	93.6	97.4	92.4	89.5	87.5	85.9	67.
Automotive	111.1	109.8	108.5	107.0	107.1	105.8	105.7	106.5	109.9	107.6	105.6	104.8	105.1	63.
Lumber and building materials	129.6	128.2	126.3	123.7	121.9	119.4	118.8	122.5	126.1	126.4	126.9	124.5	123.1	91.
Service:														
Hotels (year-round)	114.6	116.0	117.6	117.0	116.9	116.4	116.8	117.2	118.1	117.1	117.7	117.4	117.6	106.
Power laundries [3]	119.0	122.1	121.5	119.0	118.3	117.7	117.6	120.1	120.9	121.3	123.1	124.3	125.0	128.
Cleaning and dyeing [3]	154.2	159.2	162.9	160.6	159.0	154.8	149.3	152.8	156.5	159.4	164.4	162.1	160.1	134.

[1] See footnote 1, table A–8.
[2] See footnote 2, table A–8.
[3] See footnote 3, table A–8.
[4] See footnote 4, table A–8.
[5] See footnote 5, table A–8.
[6] See footnote 6, table A–8.
[7] See footnote 7, table A–8.
[8] Includes all nonsupervisory employees and working supervisors.

TABLE A–10: Indexes of Weekly Pay Rolls in Selected Nonmanufacturing Industries [1]

[1939 average=100]

Industry group and industry	1948								1947					Annual average
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1948
Mining: [2] [3]														
Coal:														
Anthracite	259.4	192.7	246.0	246.2	195.4	255.9	232.8	242.4	239.4	224.4	252.7	237.9	244.0	146.
Bituminous	366.8	293.8	344.2	344.3	167.4	342.0	320.0	350.5	345.8	327.4	327.5	321.6	314.7	203.
Metal	209.8	202.2	208.2	206.1	201.7	201.3	201.7	198.9	198.8	194.8	192.7	193.6	193.3	184.
Iron	355.6	333.1	345.0	336.3	319.7	313.8	310.3	302.7	301.1	310.2	315.5	311.0	313.0	257.
Copper	255.3	242.4	232.9	232.6	232.6	234.8	241.7	238.0	236.5	224.7	222.9	225.3	219.0	214.
Lead and zinc	189.1	193.7	238.7	238.9	235.8	234.8	235.0	228.1	231.6	220.6	209.7	216.0	220.5	226.
Gold and silver	54.2	55.2	54.2	54.6	55.2	56.7	58.4	56.4	56.5	53.7	51.7	52.1	52.1	37.
Miscellaneous	387.5	383.0	360.7	352.5	343.1	349.2	347.4	348.4	349.2	346.7	338.1	339.6	345.0	560.
Quarrying and nonmetallic	340.7	322.3	321.7	312.5	295.4	272.7	262.0	272.8	295.3	305.7	319.2	315.9	317.2	199.
Crude petroleum and natural gas production [4]	251.0	241.1	227.1	223.4	213.4	208.3	219.9	215.5	203.2	211.0	199.9	206.5	204.0	128.
Transportation and public utilities:														
Class I steam railroads	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
Street railways and busses [7]	235.2	232.2	231.2	228.1	227.1	232.6	234.7	230.1	226.7	223.6	223.2	224.1	225.2	155.
Telephone	331.3	336.4	327.1	326.1	317.7	314.7	316.3	315.8	313.0	321.5	314.2	312.3	306.2	144.
Telegraph [8]	225.5	233.2	228.5	231.1	224.8	213.0	212.6	209.5	207.8	206.8	208.1	211.8	213.5	159.
Electric light and power	204.9	202.5	196.2	192.1	188.6	184.4	188.2	187.9	185.7	187.6	182.8	183.1	182.9	109.
Trade: [9]														
Wholesale	220.6	215.3	211.8	211.8	211.0	210.8	214.9	211.7	213.9	213.6	206.9	203.3	198.2	127.
Retail	218.1	218.9	218.3	213.8	211.1	210.4	208.4	209.4	237.6	216.5	207.1	202.5	197.6	120.
Food	229.0	232.9	231.9	227.0	225.5	226.1	221.5	219.4	221.5	220.0	213.8	209.2	212.2	129.
General merchandise	231.2	234.0	236.5	229.2	225.8	225.5	221.4	233.0	314.0	251.1	225.2	220.4	212.0	135.
Apparel	195.5	202.3	214.7	211.8	209.2	208.8	194.3	198.8	248.8	222.7	213.5	203.5	182.9	133.
Furniture and housefurnishings	178.5	178.8	180.2	180.3	175.6	173.7	177.8	174.5	192.9	177.3	167.6	159.8	155.1	86.
Automotive	219.6	213.4	209.5	205.3	204.7	197.5	196.8	193.9	204.2	198.6	193.8	188.5	188.5	84.
Lumber and building materials	264.6	257.3	252.8	242.6	234.9	228.6	227.6	228.0	238.1	233.5	238.8	231.8	229.0	120.
Service:														
Hotels (year-round) [9]	233.9	234.7	236.5	234.6	233.4	229.0	233.2	230.4	233.2	228.6	226.9	222.4	221.0	138.
Power laundries [3]	228.1	240.6	238.3	232.3	231.5	227.5	225.4	232.9	233.6	226.8	232.3	236.2	231.3	167.
Cleaning and dyeing [3]	286.9	308.0	324.8	312.4	308.0	291.2	271.9	285.6	292.8	293.7	303.8	301.7	285.0	185.

[1] See footnote 1, table A–8.
[2] See footnote 2 table A–8.
[3] See footnote 3, table A–8.
[4] See footnote 4, table A–8.
[6] Not available.
[6] See footnote 6, table A–8.
[7] See footnote 7, table A–8.
[8] See footnote 8, table A–9.
[9] Money payments only; additional value of board, room, uniforms, and tips, not included.

TABLE A–11: Total Federal Employment by Branch and Agency Group [1]

Year and month	All branches	Executive				Legislative	Judicial	Government corporations [2]
		Total	Defense agencies [3]	Post Office Department [4]	All other agencies			
	Total (including areas outside continental United States)							
1939	968,596	935,493	207,979	319,474	408,040	5,373	2,260	25,470
1943	3,183,235	3,138,838	2,304,752	364,092	469,994	6,171	2,636	35,590
1947: August	2,067,228	2,026,071	923,080	442,289	660,702	7,230	3,404	30,523
September	2,020,873	1,980,084	906,989	425,449	647,646	7,184	3,406	30,199
October	2,002,385	1,962,042	901,197	425,005	635,840	7,118	3,430	29,795
November	2,006,412	1,966,339	905,251	429,789	631,299	7,068	3,453	29,552
December	2,229,164	2,189,436	894,855	667,912	626,669	7,046	3,450	29,232
1948: January	*1,985,792	1,946,076	890,719	432,920	622,437	*7,046	3,461	29,209
February	*1,992,162	1,952,533	895,850	432,696	623,987	*7,101	3,470	*29,058
March	*2,004,132	*1,964,333	*897,917	439,517	626,899	*7,217	3,462	*29,120
April	*2,020,625	1,980,998	903,814	449,260	627,924	*7,186	3,461	*28,980
May	*2,038,847	1,999,234	909,885	455,707	633,642	*7,257	3,468	*28,888
June	2,053,850	2,014,453	916,864	458,244	639,345	7,308	3,459	28,630
July	2,084,333	2,044,747	919,784	471,255	653,708	7,305	3,477	28,804
August	2,094,608	2,055,418	924,555	471,255	654,434	7,341	3,495	28,354
	Continental United States							
1939	926,659	897,602	179,381	318,802	399,419	5,373	2,180	21,504
1943	2,913,534	2,875,928	2,057,696	363,297	454,935	6,171	2,546	28,889
1947: August	1,815,905	1,782,410	708,681	440,773	632,956	7,230	3,332	22,933
September	1,781,733	1,748,530	704,575	424,005	619,950	7,184	3,334	22,685
October	1,764,384	1,731,411	699,815	423,473	608,123	7,118	3,358	22,497
November	1,771,360	1,738,587	706,418	428,252	603,917	7,068	3,381	22,324
December	*2,005,563	1,973,066	708,099	665,662	599,305	7,046	3,377	*22,074
1948: January	*1,763,295	1,730,871	704,251	431,389	595,231	*7,046	3,388	21,990
February	*1,766,130	1,733,698	705,792	431,214	596,692	*7,101	3,396	*21,935
March	*1,778,498	*1,745,869	*708,934	437,942	598,993	*7,217	3,388	*22,024
April	*1,791,674	1,759,094	710,991	447,678	600,425	*7,186	3,387	*22,007
May	*1,808,657	1,776,138	717,072	454,122	604,944	*7,257	3,394	*21,868
June	1,823,896	1,791,494	724,683	456,633	610,178	7,308	3,388	21,706
July	1,858,221	1,825,587	732,217	469,662	623,708	7,305	3,406	21,923
August	1,875,130	1,842,454	742,925	474,806	624,723	7,341	3,424	21,911

[1] Employment represents an average for the year or is as of the first of the month. Data for the legislative and judicial branches and for all Government corporations except the Panama R. R. Co. are reported directly to the Bureau of Labor Statistics. Data for the executive branch and for the Panama R. R. Co. are reported through the Civil Service Commission but differ from those published by the Civil Service Commission in the following respects: (1) Exclude seamen and trainees who are hired and paid by private steamship companies having contracts with the Maritime Commission, included by Civil Service Commission starting January 1947; (2) exclude substitute rural mail carriers, included by the Civil Service Commission since September 1945; (3) include in December the additional postal employment necessitated by the Christmas season, excluded from published Civil Service Commission figures starting 1942; (4) include an upward adjustment to Post Office Department employment prior to December 1943 to convert temporary substitute employees from a full-time equivalent to a name-count basis, the latter being the basis on which data for subsequent months have been reported; (5) the Panama R. R. Co. is shown under Government corporations here, but is included under the executive branch by the Civil Service Commission; (6) employment published by the Civil Service Commission as of the last day of the month is presented here as of the first day of the next month.

Data for Central Intelligence Agency are excluded starting August 1947.

[2] From 1939 through June 1943 employment was reported for all areas monthly and employment within continental United States was secured by deducting the number of persons outside the continental area, which was estimated from actual reports as of January 1939 and 1940 and of July 1941 and 1943. From July 1943, through December 1946, employment within continental United States was reported monthly and the number of persons outside the country (estimated from quarterly reports) was added to secure employment in all areas. Beginning January 1947, employment is reported monthly both inside and outside continental United States.

[3] Data for current months cover the following corporations: Federal Reserve banks, mixed ownership banks of the Farm Credit Administration, and the Panama R. R. Co. Data for earlier years include at various times the following additional corporations: Inland Waterways Corporation, Spruce Production Corporation, and certain employees of the Federal Deposit Insurance Corporation and of the Office of the Comptroller of the Currency, Treasury Department. Corporations not included in this column are under the executive branch.

[4] Covers the National Military Establishment, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, and until their abolition or amalgamation with a peacetime agency, the agencies created specifically to meet war and reconversion emergencies.

[5] For ways in which data differ from published figures of the Civil Service Commission, see footnote 1. Employment figures include fourth-class postmasters in all months. Prior to July 1945, clerks at third-class post offices were hired on a contract basis and therefore, because of being private employees, are excluded here. They are included beginning July 1945, however, when they were placed on the regular Federal pay roll by congressional action.

*Revised.

TABLE A–12: Total Federal Pay Rolls by Branch and Agency Group [1]

[In thousands]

Year and month	All branches	Executive [2]				Legislative	Judicial	Government corporations [3]
		Total	Defense agencies [4]	Post Office Department [5]	All other agencies			
	Total (including areas outside continental United States)							
1939	$1,757,292	$1,692,824	$357,628	$586,347	$748,849	$14,767	$6,691	$43,010
1944 [6]	8,301,111	8,206,411	6,178,387	864,947	1,163,077	18,127	9,274	67,299
1947 August	464,076	454,723	199,247	96,145	159,331	2,421	1,259	5,673
September	470,515	461,157	201,582	96,485	163,090	2,448	1,284	5,626
October	481,401	471,938	203,892	99,713	168,333	2,457	1,334	5,672
November	451,502	442,171	192,111	98,666	151,394	2,457	1,192	5,682
December	531,452	521,924	214,051	143,537	164,336	2,461	1,336	5,731
1948: January	*483,071	473,466	211,495	100,395	161,576	*2,442	*1,346	*5,817
February	*445,134	435,894	191,372	98,054	146,468	*2,414	*1,199	*5,622
March	*498,325	488,676	218,706	102,124	167,846	*2,499	1,343	*5,807
April	*477,620	468,100	204,606	100,894	162,600	*2,482	1,322	*5,716
May	474,725	465,356	205,912	100,925	158,519	2,469	1,207	*5,693
June	505,345	495,792	225,440	102,653	167,699	2,536	1,279	5,738
July	528,437	518,639	223,968	121,676	172,994	2,600	1,301	5,897
August	557,311	547,283	236,960	123,136	187,187	2,695	1,390	5,943
	Continental United States							
1944 [6]	$7,628,017	$7,540,825	$5,553,166	$862,271	$1,125,388	$18,127	$8,878	$60,187
1947: August	423,545	414,898	166,681	95,819	152,398	2,421	1,223	5,003
September	430,555	421,857	169,441	96,138	156,278	2,448	1,248	5,002
October	443,408	434,545	173,717	99,356	161,472	2,457	1,297	5,109
November	414,020	405,485	162,219	98,313	144,953	2,457	1,154	4,924
December	491,702	482,860	182,091	143,057	157,712	2,461	1,301	5,080
1948: January [6]	*443,259	434,366	179,395	100,052	154,919	*2,442	*1,309	*5,142
February	*408,614	399,975	161,996	97,703	140,276	*2,414	*1,165	*5,060
March	*456,878	447,901	185,284	101,765	160,852	*2,499	1,304	*5,173
April	*439,691	430,845	174,409	100,543	155,893	*2,482	1,288	*5,077
May	*434,657	426,011	174,209	100,570	151,232	2,469	1,174	*5,003
June	461,406	452,529	189,974	102,306	160,249	2,536	1,242	5,099
July	487,057	478,016	191,686	121,263	165,067	2,600	1,263	5,178
August	514,343	505,131	203,510	122,721	178,900	2,695	1,351	5,199

[1] Data are from a series revised June 1947 to adjust pay rolls, which from July 1945 until December 1946 were reported for pay periods ending during the month, to cover the entire calendar month. Data for the executive branch and for the Panama R. R. Co. are reported through the Civil Service Commission. Data for the legislative and judicial branches and for all Government corporations except the Panama R. R. Co. are reported directly to the Bureau of Labor Statistics. Data for Central Intelligence Agency are excluded starting July 1947.

[2] From 1939 through May 1943, pay rolls were reported for all areas monthly. Beginning June 1943, some agencies reported pay rolls for all areas and some reported pay rolls for the continental area only. Pay rolls for areas outside continental United States from June 1943 through November 1946 (except for the National Military Establishment for which these data were reported monthly during most of this period) were secured by multiplying employment in these areas (see footnote 2, table A–11, for derivation of the employment) by the average pay per person in March 1944, as revealed in a survey as of that date, adjusted for the salary increases given in July 1945 and July 1946. Beginning December 1946 pay rolls for areas outside the country are reported monthly by most agencies.

[3] See footnote 3, table A–11.

[4] See footnote 4, table A–11.

[5] Beginning July 1945, pay is included of clerks at third-class post offices who previously were hired on a contract basis and therefore were private employees and of fourth-class postmasters who previously were recompensed by the retention of a part of the postal receipts. Both these groups were placed on a regular salary basis in July 1945 by congressional action.

[6] Data are shown for 1944, instead of 1943 as in the other Federal tables, because pay rolls for employment in areas outside continental United States are not available prior to June 1943.

*Revised.

TABLE A-13: Total Government Employment and Pay Rolls in Washington, D. C., by Branch and Agency Group [1]

Year and month	Total government	District of Columbia Government	Federal						
			Total	Executive				Legislative	Judicial
				All agencies	Defense agencies [2]	Post Office Department [3]	All other agencies		
	Employment [4]								
1939	143,548	13,978	129,570	123,773	18,761	5,099	99,913	5,373	424
1943	300,914	15,875	285,040	278,363	144,319	8,273	125,771	6,171	506
1947: August	223,728	17,807	205,921	198,099	65,062	7,342	125,695	7,230	592
September	221,862	18,074	203,788	196,033	64,651	7,120	124,262	7,184	571
October	221,236	18,303	202,933	195,239	64,505	7,284	123,450	7,118	576
November	221,481	18,381	203,100	195,448	64,548	7,281	123,619	7,068	584
December	224,375	18,418	205,957	198,331	64,715	10,156	123,460	7,046	580
1948: January	*221,794	18,448	*203,346	195,714	65,065	7,258	123,391	*7,046	586
February	*224,517	18,625	*205,892	198,201	65,543	7,235	125,423	*7,101	590
March	*226,256	18,668	*207,588	*199,784	66,050	7,412	126,322	*7,217	587
April	*227,629	18,628	*209,001	201,227	66,635	7,396	127,196	*7,186	588
May	*228,864	18,669	*210,195	202,350	67,212	7,380	127,758	*7,257	588
June	229,526	18,848	210,678	202,782	67,592	7,387	127,803	7,308	588
July	233,310	19,290	214,020	206,116	69,056	7,499	129,561	7,305	599
August	234,194	18,823	215,371	207,438	70,217	7,486	129,735	7,341	592
	Pay rolls (in thousands)								
1939	$305,741	$25,226	$280,515	$264,541	$37,825	$12,524	$214,192	$14,765	$1,209
1943	737,792	32,884	704,908	685,510	*352,007	20,070	*313,433	17,785	1,613
1947: August	58,624	3,187	55,437	52,817	15,705	2,283	34,829	2,421	199
September	59,911	4,382	55,529	52,876	16,651	2,239	33,986	2,448	205
October	64,467	4,496	59,971	57,298	16,806	2,744	37,748	2,457	216
November	59,400	4,223	55,177	52,525	16,110	2,606	33,809	2,457	195
December	64,111	4,570	59,541	56,861	17,235	3,135	36,491	2,462	218
1948: January	*63,295	4,499	*58,796	56,141	16,656	2,776	36,709	*2,442	213
February	*57,991	4,281	*53,710	51,099	15,910	2,165	33,024	*2,414	197
March	*65,336	4,518	*60,818	58,104	17,900	2,340	37,864	*2,499	215
April	*62,987	4,495	*58,492	55,799	16,324	2,277	37,198	*2,482	211
May	63,492	4,422	59,070	56,400	18,045	2,234	36,121	2,469	201
June	66,658	4,561	62,097	59,350	19,250	2,300	37,800	2,536	211
July	67,206	3,459	63,747	60,930	20,234	2,651	38,045	2,600	216
August	71,817	3,468	68,349	65,426	21,465	2,723	41,239	2,695	288

[1] Data for the legislative and judicial branches and District of Columbia Government are reported to the Bureau of Labor Statistics. Data for the executive branch are reported through the Civil Service Commission but differ from those published by the Civil Service Commission in the following respects: (1) Include in December the temporary additional postal employment necessitated by the Christmas season, excluded from published Civil Service Commission figures starting 1942; (2) include an upward adjustment in Post Office Department employment prior to December 1943 to convert temporary substitute employees from a full-time equivalent to a name-count basis, the latter being the basis on which data for subsequent months have been reported; (3) exclude persons working without compensation or for $1 a year or month, included by the Civil Service Commission from June through November 1943; (4) employment published by the Civil Service Commission as of the last day of the month is presented here as of the first day of the next month.

Beginning January 1942, data for the executive branch cover, in addition to the area inside the District of Columbia, the adjacent sections of Maryland and Virginia which are defined by the Bureau of the Census as in the metropolitan area. Data for Central Intelligence Agency are excluded starting August 1947 for employment and July 1947 for pay rolls.

[2] Covers the National Military Establishment, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, and until their abolition or amalgamation with a peacetime agency, the agencies created specifically to meet war and reconversion emergencies.

[3] For ways in which data differ from published figures of the Civil Service Commission, see footnote 1.

[4] Yearly figures represent averages. Monthly figures represent (1) the number of regular employees in pay status on the first day of the month plus the number of intermittent employees who were paid during the preceding month for the executive branch, (2) the number of employees on the pay roll with pay during the pay period ending just before the first of the month for the legislative and judicial branches, and (3) the number of employees on the pay roll with pay during the pay period ending on or just before the last of the month for the District of Columbia Government.

*Revised.

TABLE A–14: Personnel and Pay in Military Branch of Federal Government [1]

[In thousands]

Year and month	Personnel (average for year or as of first of month) [2]					Type of pay				
	Total	Army and Air Forces [3]	Navy	Marine Corps	Coast Guard	Total	Pay rolls [4]	Mustering-out pay [5]	Family allowances [6]	Leave payments [7]
1939	345	192	124	19	10	$331, 523	$331, 523			
1943	8, 944	6, 733	1, 744	311	156	11, 173, 186	10, 140, 852		$1, 032, 334	
1947: August	1, 575	972	492	92	19	334, 129	248, 670	$10, 498	24, 502	$50,
September	1, 557	955	491	92	19	332, 804	248, 928	9, 632	24, 210	50,
October	1, 543	941	491	92	19	355, 961	271, 040	9, 954	25, 145	49,
November	1, 490	920	459	92	19	309, 705	252, 112	9, 117	23, 127	25,
December	1, 463	911	445	87	20	300, 257	246, 532	13, 293	23, 827	16,
1948: January	1, 422	898	421	83	20	300, 241	250, 953	13, 465	23, 454	12,
February	1, 419	905	414	80	20	281, 423	240, 493	11, 838	23, 566	5,
March	1, 422	909	413	80	20	285, 011	242, 969	13, 050	24, 997	3,
April	1, 417	906	412	79	20	285, 210	247, 452	9, 751	25, 414	2,
May	1, 419	916	403	80	20	278, 995	242, 292	9, 085	25, 736	1,
June	1, 439	930	407	82	20	277, 368	243, 239	5, 756	26, 476	1,
July	1, 463	940	420	84	20	276, 655	246, 422	2, 581	26, 353	1,
August	1, 514	978	430	86	21	278, 165	244, 547	3, 886	27, 756	1,

[1] Except for Army personnel for 1939 which is from the Annual Report of the Secretary of War, all data are from reports submitted to the Bureau of Labor Statistics by the various military branches. Because of rounding, totals will not necessarily add to the sum of the items shown.

[2] Includes personnel on active duty, the missing, those in the hands of the enemy, and those on terminal leave through October 1, 1947, when lump-sum terminal-leave payments at time of discharge were started.

[3] Prior to March 1944, data include persons on induction furlough. Prior to June 1942 and after April 1945, Philippine Scouts are included.

[4] Pay rolls are for personnel on active duty; they include payment of personnel while on terminal leave through September 1947. For officers this applies to all prior periods and for enlisted personnel back to October 1, 1946, only. Beginning October 1, 1947, they include lump-sum terminal-leave payments made at time of discharge. Coast Guard pay rolls for all periods and Army pay rolls through April 1947 represent actual expenditures. Other data represent estimated obligations based on an average monthly personnel count. Pay rolls for the Navy and Coast Guard include cash payments for clothing-allowance balances in January, April, July, and October.

[5] Represents actual expenditures.

[6] Represents Government's contribution. The men's share is included in the pay rolls.

[7] Leave payments were authorized by Public Law 704 of the 79th Congress and were continued by Public Law 254 of the 80th Congress to enlisted personnel discharged prior to September 1, 1946, for accrued and unused leave and to officers and enlisted personnel then on active duty for leave accrued in excess of 60 days. Value of bonds (representing face value, to which interest is added when bonds are cashed) and cash payments are included. Lump-sum payments for terminal leave, which were authorized by Public Law 350 of the 80th Congress, and which were started in October 1947, are excluded here and included under pay rolls.

B: Labor Turn-Over

TABLE B–1: Monthly Labor Turn-Over Rates (Per 100 Employees) in Manufacturing Industries by Class of Turn-Over [1]

Class of turn-over and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total accession:												
1948	4.6	3.9	4.0	4.0	4.1	5.7	[2] 4.7					
1947	6.0	5.0	5.1	5.1	4.8	5.5	4.9	5.3	5.9	5.5	4.8	1
1946	8.5	6.8	7.1	6.7	6.1	6.7	7.4	7.0	7.1	6.8	5.7	4
1943	8.3	7.9	8.3	7.4	7.2	8.4	7.8	7.6	7.7	7.2	6.6	5
1939 [3]	4.1	3.1	3.3	2.9	3.3	3.9	4.2	5.1	6.2	5.9	4.1	2
Total separation:												
1948	4.3	4.2	4.5	4.7	4.3	4.5	[2] 4.4					
1947	4.9	4.5	4.9	5.2	5.4	4.7	4.6	5.3	5.9	5.0	4.0	3
1946	6.8	6.3	6.6	6.3	6.3	5.7	5.8	6.6	6.9	6.3	4.9	4
1943	7.1	7.1	7.7	7.5	6.7	7.1	7.6	8.3	8.1	7.0	6.4	6
1939 [3]	3.2	2.6	3.1	3.5	3.5	3.3	3.3	3.0	2.8	2.9	3.0	1
Quit: [4]												
1948	2.6	2.5	2.8	3.0	2.8	2.9	[2] 2.9					
1947	3.5	3.2	3.5	3.7	3.5	3.1	3.1	4.0	4.5	3.6	2.7	1
1946	4.3	3.9	4.2	4.3	4.2	4.0	4.6	5.3	5.3	4.7	3.7	2
1943	4.5	4.7	5.4	5.4	4.8	5.2	5.6	6.3	6.3	5.2	4.5	4
1939 [3]	.9	.6	.8	.8	.7	.7	.7	.8	1.1	.9	.8	
Discharge:												
1948	.4	.4	.4	.4	.3	.4	[2] .4					
1947	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	
1946	.5	.5	.4	.4	.4	.3	.4	.4	.4	.4	.4	
1943	.5	.5	.6	.5	.6	.6	.7	.7	.6	.6	.6	
1939 [3]	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2	.2	
Lay-off: [4]												
1948	1.2	1.2	1.2	1.2	1.1	1.1	[2] 1.0					
1947	.9	.8	.9	1.0	1.4	1.1	1.0	.8	.9	.9	.8	
1946	1.8	1.7	1.8	1.4	1.5	1.2	.6	.7	1.0	1.0	.7	1
1943	.7	.5	.5	.6	.5	.5	.5	.5	.5	.5	.7	1
1939 [3]	2.2	1.9	2.2	2.6	2.7	2.5	2.5	2.1	1.6	1.8	2.0	2
Miscellaneous, including military: [4]												
1948	.1	.1	.1	.1	.1	.1	[2] .1					
1947	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	
1946	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.1	
1943	1.4	1.4	1.2	1.0	.8	.8	.8	.8	.7	.7	.6	

[1] Month-to-month changes in total employment in manufacturing industries as indicated by labor turn-over rates are not precisely comparable to those shown by the Bureau's employment and pay-roll reports, as the former are based on data for the entire month, while the latter, for the most part, refer to a 1-week period ending nearest the 15th of the month. The turn-over sample is not so extensive as that of the employment and pay-roll survey—proportionately fewer small plants are included; printing and publishing, and certain seasonal industries, such as canning and preserving, are not covered. Plants on strike are also excluded.

[2] Preliminary figures.

[3] Prior to 1943, rates relate to wage earners only.

[4] Prior to September 1940, miscellaneous separations were included with quits.

[5] Including temporary, indeterminate (of more than 7 days' duration) and permanent lay-offs.

TABLE B–2: Monthly Labor Turn-Over Rates (Per 100 Employees) in Selected Industries [1]

Industry	Total accession		Separation									
			Total		Quit		Discharge		Lay-off		Miscellaneous, including military	
	July [2] 1948	June 1948	July [2] 1948	June 1948	July [2] 1948	June 1948	July [2] 1948	June 1948	July [2] 1948	June 1948	July [2] 1948	June 1948
MANUFACTURING												
urable goods	4.6	5.6	4.4	4.5	2.9	3.0	0.4	0.4	0.9	1.0	0.2	0.1
ondurable goods	4.7	5.7	4.3	4.5	2.8	2.9	.3	.4	1.1	1.1	.1	.1
Durable goods												
on and steel and their products	4.1	5.0	3.7	3.8	2.8	2.7	.3	.4	.4	.5	.2	.2
Blast furnaces, steel works, and rolling mills	3.8	4.6	3.0	2.9	2.5	2.4	.2	.2	.1	.1	.2	.2
Gray-iron castings	4.7	6.3	4.6	5.2	3.3	3.8	.7	.6	.5	.7	.1	.1
Malleable-iron castings	5.0	7.1	7.1	5.4	4.8	4.4	.6	.4	1.5	.4	.2	.2
Steel castings	4.3	6.1	4.2	4.2	3.3	3.3	.6	.6	.1	.2	.2	.1
Cast-iron pipe and fittings	3.9	3.9	3.9	1.9	3.4	1.5	.3	.2	.1	.1	.1	.1
Tin cans and other tinware	10.5	9.3	4.7	5.3	3.5	3.2	.9	.7	.1	1.2	.2	.2
Wire products	3.9	3.9	3.0	3.1	2.4	1.7	.3	.3	.2	.9	.1	.2
Cutlery and edge tools	2.4	2.0	3.2	3.9	2.0	1.4	.5	.4	.6	2.0	.1	.1
Tools (except edge tools, machine tools, files, and saws)	2.2	1.8	2.8	3.5	1.9	2.5	.3	.4	.5	.5	.1	.1
Hardware	3.3	4.0	4.3	4.1	2.6	2.5	.4	.4	1.1	1.0	.2	.2
Stoves, oil burners, and heating equipment	6.0	6.2	4.3	6.0	3.1	3.2	.3	.5	.8	2.2	.1	.1
Steam and hot-water heating apparatus and steam fittings	3.2	5.4	4.5	6.0	3.0	3.9	.4	.7	1.0	1.2	.1	.2
Stamped and enameled ware and galvanizing	5.9	7.8	5.0	5.5	3.6	4.0	.5	.5	.7	.9	.2	.1
Fabricated structural-metal products	3.6	5.2	2.8	3.6	2.0	2.2	.3	.4	.4	.9	.1	.1
Bolts, nuts, washers, and rivets	2.2	2.3	2.8	2.9	1.8	1.9	.2	.4	.6	.4	.2	.2
Forgings, iron and steel	3.6	4.2	3.0	4.0	1.9	2.4	.3	.4	.7	1.0	.1	.2
lectrical machinery	2.9	3.4	3.0	3.8	1.8	2.1	.2	.2	.9	1.4	.1	.1
Electrical equipment for industrial use	2.0	2.5	2.0	2.3	1.2	1.5	.1	.1	.5	.5	.2	.2
Radios, radio equipment, and phonographs	3.6	5.7	3.8	5.0	2.5	2.8	.3	.4	.9	1.6	.1	.2
Communication equipment, except radios	[3]	1.8	[3]	4.0	[3]	2.0	[3]	.1	[3]	1.8	[3]	.1
Machinery, except electrical	2.8	4.4	3.3	3.6	2.0	2.3	.3	.4	.8	.7	.2	.2
Engines and turbines	3.1	4.8	3.6	5.2	2.3	1.9	.3	.4	.9	2.1	.1	.8
Agricultural machinery and tractors	3.3	5.7	4.2	4.6	2.9	3.7	.3	.4	.7	.3	.3	.2
Machine tools	2.3	2.4	2.1	3.1	1.3	1.3	.2	.2	.4	1.4	.2	.2
Machine-tool accessories	2.4	3.2	2.6	2.8	1.5	1.5	.2	.3	.8	.9	.1	.1
Metalworking machinery and equipment, not elsewhere classified	3.1	3.4	2.6	2.6	2.1	2.1	.3	.3	.1	.1	.1	.1
General industrial machinery, except pumps	3.2	5.0	3.1	3.4	1.9	2.3	.3	.4	.7	.6	.2	.1
Pumps and pumping equipment	2.1	2.9	3.5	4.7	1.3	1.5	.3	.4	1.8	2.6	.1	.2
Transportation equipment, except automobiles	6.2	6.9	6.2	7.7	2.5	2.7	.4	.3	3.1	4.6	.2	.1
Aircraft	5.7	5.7	5.0	4.0	2.9	2.8	.3	.2	1.6	.9	.2	.1
Aircraft parts, including engines	3.0	3.9	2.5	2.7	1.3	1.4	.3	.3	.8	1.0	.1	[4]
Shipbuilding and repairs	[3]	10.0	[3]	15.8	[3]	3.1	[3]	.5	[3]	12.1	[3]	.1
Automobiles	5.7	8.1	5.0	5.3	3.3	3.9	.5	.5	1.0	.7	.2	.2
Motor vehicles, bodies, and trailers	8.5	8.0	7.5	5.6	5.5	4.4	.7	.4	1.1	.6	.2	.2
Motor-vehicle parts and accessories	5.9	8.4	5.1	4.5	2.6	2.8	.7	.6	1.6	.9	.2	.2
Nonferrous metals and their products	3.9	4.9	3.5	3.8	2.3	2.5	.4	.4	.7	.8	.1	.1
Primary smelting and refining, except aluminum and magnesium	3.0	4.0	2.5	2.7	1.6	1.8	.5	.5	.2	.2	.2	.2
Rolling and drawing of copper and copper alloys	3.3	2.4	2.2	1.7	1.8	1.2	.2	.2	.1	.2	.1	.1
Lighting equipment	4.8	8.8	2.4	5.1	1.7	2.5	.5	.5	.2	2.1	[4]	[4]
Nonferrous-metal foundries, except aluminum and magnesium	4.2	5.2	3.5	4.7	2.7	3.0	.3	.5	.3	1.1	.2	.1
Lumber and timber basic products	7.0	7.6	6.5	5.6	5.1	4.6	.5	.3	.8	.6	.1	.1
Sawmills	7.3	6.8	6.8	4.7	5.4	4.1	.6	.2	.7	.4	.1	[4]
Planing and plywood mills	4.7	5.0	4.2	4.3	3.0	3.0	.3	.3	.7	.9	.2	.1
Furniture and finished lumber products	6.5	6.9	6.8	5.9	4.6	3.9	.5	.5	1.6	1.4	.1	.1
Furniture, including mattresses and bedsprings	6.7	6.8	6.8	6.1	4.6	3.9	.5	.6	1.5	1.5	.2	.1
tone, clay, and glass products	4.1	4.9	3.5	4.1	2.4	2.7	.3	.4	.6	.9	.2	.1
Glass and glass products	3.6	4.1	3.6	4.5	1.8	2.0	.2	.3	1.3	2.0	.3	.2
Cement	4.3	5.2	4.0	3.7	3.0	2.9	.6	.4	.2	.2	.2	.2
Brick, tile, and terra cotta	5.4	7.0	4.7	4.5	3.8	3.7	.6	.6	.2	.2	.1	[4]
Pottery and related products	5.4	4.9	3.7	4.1	3.0	3.2	.4	.4	.2	.5	.1	[4]

See footnotes at end of table.

TABLE B–2: Monthly Labor Turn-Over Rates (Per 100 Employees) in Selected Industries [1]—Continued

Industry	Total accession		Separation									
			Total		Quit		Discharge		Lay-off		Miscellaneous, including military	
	July [2] 1948	June 1948	July [2] 1948	June 1948	July [2] 1948	June 1948	July [2] 1948	June 1948	July [2] 1948	June 1948	July [2] 1948	June 1948
MANUFACTURING—Continued												
Nondurable goods												
Textile-mill products	3.8	4.3	4.1	3.8	2.8	2.7	0.3	0.3	0.9	0.7	0.1	0.1
Cotton	4.1	4.5	4.7	4.3	3.4	3.3	.4	.4	.8	.5	.1	.1
Silk and rayon goods	4.2	4.4	4.1	3.6	3.0	2.7	.3	.3	.7	.5	.1	.1
Woolen and worsted, except dyeing and finishing	4.6	4.0	3.5	3.5	1.9	1.7	.2	.3	1.1	1.4	.3	.3
Hosiery, full-fashioned	3.0	4.1	2.5	2.9	2.2	2.1	.1	.2	.2	.5	(4)	
Hosiery, seamless	3.0	4.3	5.2	6.4	2.9	3.4	.1	.2	2.1	2.6	.1	
Knitted underwear	3.1	4.0	4.6	4.2	3.2	3.1	.3	.3	1.0	.8	.1	(4)
Dyeing and finishing textiles, including woolen and worsted	1.9	2.2	2.7	2.3	1.3	1.4	.4	.3	.8	.4	.2	.1
Apparel and other finished textile products	5.3	4.2	4.9	4.8	3.5	3.1	.2	.3	1.1	1.4	.1	(4)
Men's and boys' suits, coats, and overcoats	3.4	2.9	3.4	3.0	1.9	1.8	.1	.2	1.4	1.0	(4)	(4)
Men's and boys' furnishings, work clothing, and allied garments	4.9	4.2	4.9	5.4	4.2	3.7	.1	.2	.6	1.5	(4)	(4)
Leather and leather products	4.5	5.3	4.3	3.8	3.4	3.1	.2	.2	.6	.4	.1	.1
Leather	3.0	3.8	2.8	2.5	2.0	1.6	.2	.2	.5	.6	.1	.1
Boots and shoes	4.7	5.6	4.6	3.9	3.7	3.3	.2	.2	.6	.3	.1	.1
Food and kindred products	7.1	10.3	6.8	7.1	3.6	4.4	.7	.7	2.3	1.8	.2	.2
Meat products	7.4	13.2	7.7	9.4	3.5	5.2	.9	1.0	3.0	2.9	.3	.3
Grain-mill products	9.5	7.6	5.8	4.1	4.3	2.9	.6	.5	.8	.7	.1	(4)
Tobacco manufactures	3.8	4.0	3.6	4.0	3.0	2.7	.2	.2	.3	1.0	.1	.1
Paper and allied products	3.8	5.0	3.0	3.1	2.3	2.1	.3	.4	.3	.5	.1	.1
Paper and pulp	3.2	4.7	2.6	2.5	1.9	1.7	.3	.3	.3	.4	.1	.1
Paper boxes	5.1	5.2	4.3	3.9	3.4	3.0	.4	.4	.3	.4	.2	.2
Chemicals and allied products	2.4	3.1	1.9	2.2	1.3	1.3	.2	.3	.3	.5	.1	.1
Paints, varnishes, and colors	2.6	3.8	2.1	2.4	1.5	1.5	.2	.3	.3	.5	.1	.1
Rayon and allied products	1.9	2.5	1.3	1.3	1.0	.9	.1	.1	.1	.1	.1	.1
Industrial chemicals, except explosives	2.4	3.4	2.2	2.6	1.4	1.5	.3	.3	.4	.7	.1	.1
Products of petroleum and coal	1.5	2.6	1.0	1.0	.6	.7	.1	.1	.1	.1	.2	.2
Petroleum refining	1.2	2.2	.9	.8	.5	.5	.1	.1	.1	.1	.2	.2
Rubber products	3.1	3.9	2.8	3.4	2.1	2.3	.2	.2	.3	.7	.2	.2
Rubber tires and inner tubes	2.6	3.2	2.2	2.5	1.6	1.5	.2	.1	.2	.8	.2	.2
Rubber footwear and related products	3.6	5.4	3.2	5.8	2.7	4.1	.1	.2	(4)	.9	.4	.4
Miscellaneous rubber industries	3.8	4.6	3.9	4.2	2.8	3.0	.3	.4	.6	.8	.2	.2
Miscellaneous industries	4.2	4.0	2.7	2.3	1.7	1.7	.2	.2	.7	.3	.1	.1
NONMANUFACTURING												
Metal mining	5.2	6.4	5.1	4.8	4.2	4.0	.4	.3	.3	.3	.2	.2
Iron-ore	1.8	5.0	1.8	2.7	1.5	1.9	.1	.2	(4)	.2	.2	.2
Copper-ore	6.1	7.0	6.3	5.7	5.5	5.2	.3	.2	.3	.1	.2	.2
Lead- and zinc-ore	7.8	7.4	7.6	6.3	5.4	5.2	1.0	.7	1.1	.3	.1	.1
Coal mining:												
Anthracite	1.6	1.4	1.8	1.5	1.4	1.1	(4)	.1	.3	.2	.1	.1
Bituminous-coal	4.5	2.8	3.5	2.9	3.2	2.5	.1	.1	.1	.2	.1	.1
Public utilities:												
Telephone	3.4	3.8	2.2	2.1	1.9	1.8	.1	.1	.1	.1	.1	.1
Telegraph	1.8	2.2	2.1	2.2	1.4	1.2	.1	.1	.5	.8	.1	.1

[1] Since January 1943 manufacturing firms reporting labor turn-over information have been assigned industry codes on the basis of current products. Most plants in the employment and pay-roll sample, comprising those which were in operation in 1939, are classified according to their major activity at that time, regardless of any subsequent change in major products. Labor turn-over data, beginning in January 1943, refer to wage and salary workers. Employment information for wage and salary workers is available for major manufacturing industry groups (table A-3); for individual industries these data refer to production workers only (table A-5).

[2] Preliminary figures.

[3] Not available.

[4] Less than 0.05.

NOTE: Explanatory notes outlining briefly the concepts, sources, size of the reporting sample, and methodology used in preparing the data presented in tables B–1 and B–2 are contained in the Bureau's monthly mimeographed release, "Labor Turn-over," which is available upon request.

C: Earnings and Hours

TABLE C–1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]

MANUFACTURING

Year and month	All manufacturing			Durable goods			Nondurable goods			Iron and steel and their products								
										Total: Iron and steel and their products			Blast furnaces, steel works, and rolling mills			Gray-iron and semi-steel castings		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$23.86	37.7	63.3	$26.50	38.0	69.8	$21.78	37.4	58.2	$27.52	37.2	73.9	$29.88	35.3	84.5	$25.93	37.1	69.9
1941: January	26.64	39.0	68.3	30.48	40.7	74.9	22.75	37.3	61.0	31.07	40.4	76.9	33.60	38.7	86.9	30.45	41.2	73.9
1947: July	48.98	39.8	123.0	52.19	40.0	130.5	45.61	39.7	115.0	53.67	39.3	136.5	55.23	37.4	147.8	55.64	41.6	134.1
August	49.17	39.8	123.6	52.46	40.0	131.2	45.78	39.5	115.8	54.53	39.6	137.6	58.25	39.2	148.8	53.77	40.3	133.5
September	50.47	40.4	124.9	54.06	40.6	133.1	46.80	40.2	116.5	56.21	40.3	139.6	58.96	39.0	151.3	56.86	41.7	137.1
October	51.05	40.6	125.8	54.69	40.9	133.7	47.29	40.2	117.5	56.61	40.5	139.7	58.56	39.0	150.2	56.66	41.9	136.5
November	51.29	40.4	126.8	54.86	40.7	134.6	47.56	40.1	118.5	56.93	40.5	140.4	59.52	39.4	151.0	55.51	40.9	135.9
December	52.69	41.2	127.8	56.48	41.7	135.4	48.72	40.8	119.6	58.13	41.2	141.2	60.01	39.5	151.9	58.16	42.5	136.8
1948: January	52.07	40.5	128.5	55.46	40.9	135.5	48.45	40.0	121.0	57.43	40.6	141.4	60.58	39.5	153.3	57.31	41.6	137.9
February	51.75	40.2	128.7	54.77	40.5	135.2	48.56	39.9	121.7	56.99	40.4	140.9	59.74	39.5	151.3	57.24	41.2	139.0
March	52.07	40.4	128.9	55.25	40.9	135.2	48.66	39.9	122.0	57.28	40.6	141.2	59.26	39.4	151.0	58.47	41.8	140.1
April	51.79	40.1	129.2	54.96	40.5	135.7	48.33	39.6	122.0	56.49	39.9	141.6	58.37	38.6	151.3	56.39	40.2	140.4
May	51.86	39.9	130.1	54.81	40.1	136.6	48.65	39.6	123.0	57.39	40.3	142.3	60.54	39.9	151.5	55.15	39.3	140.3
June	52.89	40.2	131.5	56.23	40.7	138.3	49.37	39.8	124.2	57.70	40.3	143.1	59.54	39.3	151.5	57.85	40.7	142.2
July	53.08	39.9	133.2	56.48	40.2	140.6	49.50	39.5	125.2	57.74	39.6	145.7	60.37	38.7	155.9	56.66	39.8	142.6

Iron and steel and their products—Continued

Year and month	Malleable-iron castings			Steel castings			Cast-iron pipe and fittings			Tin cans and other tinware			Wirework			Cutlery and edge tools		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$24.16	36.0	67.1	$27.97	36.9	75.9	$21.33	36.4	58.1	$23.61	38.8	61.1	$25.96	38.1	68.3	$23.11	39.1	60.1
1941: January	28.42	40.2	70.7	32.27	41.4	78.0	25.42	40.5	62.6	25.31	39.8	63.9	28.27	39.7	71.2	25.90	40.5	65.2
1947: July	55.08	40.4	136.4	56.25	40.3	139.5	49.65	41.4	119.6	51.34	41.5	124.1	51.85	39.7	131.1	47.45	41.2	115.1
August	51.68	37.7	137.2	54.71	39.1	139.9	46.79	39.9	118.4	53.57	42.5	125.9	51.45	39.6	130.0	46.56	40.2	115.8
September	55.66	40.3	139.0	56.50	39.9	141.5	48.34	40.5	118.4	55.28	43.4	127.5	53.70	40.3	132.3	49.20	42.2	117.1
October	57.73	41.2	141.1	58.15	40.7	142.9	49.60	41.4	119.8	53.74	42.5	127.0	54.35	41.0	132.6	49.57	42.1	117.5
November	58.06	41.2	141.7	58.73	41.0	143.4	48.93	40.7	120.1	52.16	41.1	126.8	56.10	42.0	133.5	50.48	42.3	119.2
December	59.18	41.8	141.4	60.05	41.6	144.3	50.98	42.2	120.6	53.92	42.5	126.5	57.83	42.6	135.6	50.26	42.0	119.7
1948: January	59.03	41.5	142.0	59.48	41.1	144.6	49.67	40.4	122.5	51.45	40.7	126.3	56.36	41.8	134.7	49.91	41.8	119.2
February	57.44	40.8	140.5	58.52	40.5	144.5	50.42	40.3	125.0	50.44	40.1	126.3	55.47	41.1	134.9	50.09	41.6	119.3
March	57.79	40.8	141.4	59.88	41.3	145.0	50.21	40.1	124.8	49.76	39.8	125.1	55.70	41.0	135.5	50.20	41.5	120.7
April	56.77	39.8	142.4	60.13	41.2	145.8	48.52	38.5	125.8	49.65	39.8	125.0	54.96	40.4	136.0	49.90	41.4	120.5
May	57.21	40.4	141.5	60.49	41.3	146.3	51.07	40.2	127.1	50.98	40.2	127.3	55.11	40.5	136.7	50.22	41.2	121.7
June	57.46	40.1	143.0	61.60	41.7	147.9	52.74	40.9	128.8	53.04	41.0	129.5	55.82	40.5	138.2	50.36	41.4	121.6
July	57.37	40.0	143.4	58.71	40.0	146.7	52.02	40.7	128.1	56.95	41.8	136.1	57.36	40.3	143.1	50.05	40.4	123.5

Iron and steel and their products—Continued

Year and month	Tools (except edge tools, machine tools, files, and saws)			Hardware			Plumbers' supplies			Stoves, oil burners, and heating equipment, not elsewhere classified			Steam and hot-water heating apparatus and steam fittings			Stamped and enameled ware and galvanizing		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$24.49	39.7	61.8	$23.13	38.9	59.3	$25.80	38.2	67.6	$25.25	38.1	66.6	$26.19	37.6	69.7	$23.92	38.1	62.7
1941: January	29.49	44.7	66.2	25.24	40.9	62.1	27.13	39.0	69.6	26.07	38.7	67.8	30.98	42.5	73.2	26.32	39.4	66.5
1947: July	49.40	41.0	120.4	49.29	41.0	120.1	52.45	40.3	130.1	50.65	40.0	126.6	52.74	39.6	133.1	50.11	39.3	127.4
August	50.10	41.0	122.1	48.19	40.2	121.0	49.93	38.9	128.5	49.75	39.0	127.5	50.60	38.1	132.9	50.40	39.5	127.6
September	52.39	42.2	124.3	50.43	41.3	122.2	52.38	40.0	131.0	53.32	40.9	130.5	54.54	40.4	135.2	51.72	39.9	129.7
October	52.47	42.1	124.8	51.22	41.7	122.8	54.65	40.7	134.3	55.15	41.6	132.6	55.46	41.1	135.0	52.40	40.4	129.8
November	52.97	42.2	125.5	51.58	41.6	123.3	56.42	41.4	136.4	53.39	40.1	133.1	57.64	41.8	138.0	52.81	40.5	130.5
December	54.44	43.0	126.6	52.55	42.2	124.5	57.00	41.6	137.0	56.22	42.0	133.9	58.66	42.2	138.9	54.72	41.5	132.0
1948: January	54.24	42.6	127.3	53.29	42.4	125.6	55.61	40.8	136.5	54.24	40.3	134.5	54.87	40.3	136.3	53.65	40.7	131.9
February	54.02	42.3	127.8	52.79	42.3	124.9	55.26	40.4	136.7	54.59	40.2	135.8	57.07	41.3	138.3	52.42	40.0	131.1
March	54.68	42.6	128.7	52.63	42.0	125.2	56.54	41.2	137.4	54.12	40.1	135.2	56.53	40.9	138.0	52.78	40.3	131.1
April	54.15	41.9	129.3	52.05	41.6	125.1	56.27	40.6	138.6	54.34	39.9	136.3	56.13	40.7	137.8	52.93	40.1	132.1
May	54.01	41.6	129.9	50.84	40.4	125.3	56.93	41.0	138.8	54.18	39.7	136.6	56.90	40.7	139.6	53.75	40.3	133.2
June	54.96	42.1	130.8	51.66	40.6	127.0	56.51	40.4	140.1	55.95	40.2	139.2	57.68	40.7	141.8	53.54	40.2	133.0
July	54.11	41.2	131.4	49.64	38.7	128.4	56.48	40.2	140.5	55.84	40.0	139.7	59.42	41.0	144.8	52.62	38.6	136.3

See footnotes at end of table.

TABLE C–1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con.

MANUFACTURING—Continued

Iron and steel and their products—Continued

Year and month	Fabricated structural and ornamental metalwork			Metal doors, sash, frames, molding, and trim			Bolts, nuts, washers, and rivets			Forgings, iron and steel			Screw-machine products and wood screws			Steel barrels, kegs, and drums		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$27.95	38.5	72.7	-------	-------	-------	$26.04	37.7	69.0	$29.45	38.4	76.7	-------	-------	-------	-------	-------	-------
1941: January	31.01	41.8	74.3	-------	-------	-------	29.58	41.9	70.6	36.75	45.0	81.8	-------	-------	-------	-------	-------	-------
1947: July	53.54	40.7	131.6	$52.42	40.8	128.6	51.88	40.0	129.5	59.07	39.7	148.9	$52.93	41.4	127.8	$53.04	40.3	131.6
August	55.64	41.7	133.4	54.12	41.2	131.5	52.45	40.0	131.0	57.42	38.7	148.4	52.38	40.8	128.4	53.38	40.3	132.4
September	55.87	41.6	134.4	55.75	42.0	132.8	53.08	40.2	131.7	62.38	40.9	152.6	53.91	41.9	128.5	55.08	40.7	135.3
October	57.60	42.6	135.2	56.48	42.0	134.4	56.52	42.1	133.9	65.54	41.8	156.9	55.02	42.1	130.6	52.13	39.4	132.2
November	57.31	42.0	136.8	57.11	42.7	133.9	55.98	41.3	135.3	65.00	41.4	157.2	54.55	41.6	131.1	53.81	40.8	132.0
December	58.81	42.7	137.8	58.97	43.5	135.4	57.79	42.5	135.9	67.20	42.2	159.1	56.77	43.0	131.9	57.08	42.5	134.4
1948: January	55.76	41.1	135.6	56.49	42.0	134.6	55.68	40.6	136.9	65.74	41.6	158.1	56.54	42.7	132.4	55.31	41.0	135.6
February	55.31	40.9	135.3	55.88	41.7	134.2	57.38	42.0	136.4	65.51	41.4	158.3	56.62	42.8	132.4	51.35	38.2	134.3
March	56.15	41.1	137.1	57.35	41.1	138.5	59.20	43.1	137.2	64.42	40.8	157.9	56.99	42.9	132.7	53.16	39.5	134.4
April	55.77	40.8	136.5	57.97	41.2	139.2	58.44	42.5	137.5	63.10	40.0	157.7	56.30	42.4	132.7	53.49	39.2	136.1
May	57.16	41.2	138.8	58.55	41.0	141.2	57.88	42.2	137.1	62.64	40.0	156.6	56.06	42.1	133.1	55.31	40.4	136.9
June	57.84	41.2	139.5	61.49	42.7	142.6	58.76	42.3	138.6	64.74	40.7	158.0	55.72	41.9	132.9	55.41	40.5	136.9
July	55.39	39.4	139.8	58.05	40.4	142.0	57.96	41.9	138.4	63.44	40.0	158.5	55.75	41.3	135.1	52.97	38.2	138.1

Year and month	Iron and steel and their products—Continued			Electrical machinery												Machinery, except electrical		
	Firearms			Total: Electrical machinery			Electrical equipment			Radios and phonographs			Communication equipment			Total: Machinery, except electrical		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$27.28	41.3	66.0	$27.09	38.6	70.2	$27.95	38.7	72.2	$22.34	38.5	58.1	$28.74	38.3	75.1	$29.27	39.3	74.6
1941: January	35.09	48.6	72.2	31.84	42.4	75.1	33.18	43.4	76.5	24.08	38.2	63.2	32.47	41.4	78.4	34.36	44.0	78.1
1947: July	56.69	41.0	138.4	52.00	39.8	130.8	53.84	40.1	134.4	46.17	39.6	116.6	50.57	38.7	130.6	56.06	40.9	137.1
August	56.65	40.8	138.9	51.53	39.2	131.4	53.50	39.6	135.0	44.29	38.0	116.7	51.18	38.9	131.6	55.74	40.5	137.7
September	58.51	41.8	140.1	53.46	40.4	132.5	55.05	40.5	136.0	47.24	40.0	118.2	53.66	40.2	133.5	57.36	41.1	139.5
October	57.90	41.2	140.5	54.10	40.6	133.1	55.35	40.6	136.4	47.98	40.2	119.3	55.81	41.4	135.0	57.87	41.3	140.0
November	58.53	41.1	142.4	54.32	40.6	133.9	55.76	40.6	137.4	47.61	39.8	119.7	55.94	41.4	135.2	57.92	41.2	140.6
December	60.01	42.0	142.9	55.34	41.1	134.6	56.99	41.2	138.4	48.59	40.4	120.3	56.15	41.7	134.8	59.67	42.2	141.3
1948: January	59.88	41.8	143.4	54.82	40.5	135.2	56.77	40.8	139.1	47.56	39.6	120.2	54.64	40.5	135.1	59.13	41.8	141.5
February	60.80	42.1	144.6	54.50	40.4	134.8	56.11	40.6	138.2	47.00	39.2	120.0	55.83	41.1	135.9	58.65	41.4	141.7
March	62.33	42.7	146.0	54.41	40.3	135.0	56.23	40.5	138.8	47.00	39.2	119.9	54.78	40.5	135.5	59.12	41.6	142.1
April	61.16	41.8	146.3	53.86	39.9	135.0	55.70	40.2	138.7	47.01	39.1	120.1	53.49	39.6	135.3	59.30	41 4	143.1
May	61.42	41 9	146.6	53.70	39.6	135.7	55.41	39.9	139.0	46.97	38.8	121.1	53.59	39.3	136.4	59.33	41.2	144.1
June	63.10	42.1	148.9	54.84	40.0	137.3	56.49	40.2	141.0	48.10	39.1	122.9	54.06	39.7	136.3	60.50	41.4	146.1
July	63.06	42.4	148.9	55.60	39.5	140.9	57.14	39.5	145.2	49.45	39.7	124.7	54.38	39.0	139.5	59.97	40.7	147.5

Machinery, except electrical—Continued

Year and month	Machinery and machine-shop products			Engines and turbines			Tractors			Agricultural machinery, excluding tractors			Machine tools			Machine-tool accessories		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$28.76	39.4	73.0	$28.67	37.4	76.7	$32.13	38.3	83.9	$26.46	37.0	71.6	$32.25	42.9	75.2	$31.78	40.9	77.7
1941: January	34.00	43.7	77.7	36.50	44.1	82.7	36.03	41.5	86.8	29.92	39.5	75.7	40.15	50.4	79.7	37.90	50.0	75.8
1947: July	55.00	40.8	134.9	59.51	40.3	147.7	57.77	40.1	144.0	56.83	41.0	138.5	56.78	41.6	136.6	58.42	41.2	143.0
August	55.07	40.9	135.3	61.34	40.9	151.0	57.67	40.0	144.3	56.29	40.3	139.2	57.77	41.4	139.4	57.43	39.9	144.7
September	56.41	41.3	137.0	60.16	40.5	149.4	59.08	40.7	145.0	57.97	40.6	141.7	58.69	41.8	140.5	61.16	41.2	148.6
October	56.75	41.3	137.4	58.72	39.6	148.9	60.17	41.1	146.5	58.36	40.9	143.9	59.25	42.1	140.8	61.42	41.4	148.2
November	57.03	41.4	138.1	62.04	41.2	151.6	60.13	41.1	146.4	55.91	39.6	141.5	59.53	41.9	141.2	61.30	41.1	149.4
December	59.22	42.7	139.1	61.14	40.5	151.9	60.24	41.3	145.9	57.85	40.6	142.4	61.34	43.1	142.4	63.47	42.4	149.7
1948: January	58.33	42.0	138.9	62.79	41.3	152.9	60.10	41.1	146.2	57.84	40.4	143.3	59.64	42.0	142.0	63.58	42.2	150.8
February	58.11	41.8	139.2	62.66	41.6	152.7	59.40	40.6	146.4	57.80	40.4	143.2	60.54	42.3	143.2	63.59	42.2	150.8
March	58.29	41.8	139.5	63.31	41.6	152.5	59.43	40.6	146.4	59.55	41.0	145.1	60.58	42.3	143.3	62.30	41.8	149.1
April	58.57	41.6	140.8	62.47	41.0	153.0	60.08	39.4	152.6	58.87	40.5	145.5	60.29	42.0	143.7	63.50	42.0	151.3
May	59.05	41.6	141.8	63.46	41.2	154.3	54.12	35.5	152.6	59.44	40.7	146.1	60.63	42.0	144.3	63.19	41.8	151.4
June	59.51	41.6	143.2	63.59	40.2	158.1	61.83	40.8	151.6	61.31	41.1	149.3	61.75	42.0	146.9	62.23	41.4	150.4
July	58.81	40.7	144.4	61.53	38.8	158.8	64.14	40.8	155.4	60.22	40.0	150.4	60.90	41.4	146.9	62.71	41.3	151.8

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con.

MANUFACTURING—Continued

Machinery, except electrical—Continued

Year and month	Textile machinery			Typewriters			Cash registers; adding, and calculating machines			Washing machines, wringers, and driers, domestic			Sewing machines, domestic and industrial			Refrigerators and refrigeration equipment		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$26.19	39.8	66.0	$23.98	37.3	64.3	$30.38	37.2	81.2	-------	-------	-------	-------	-------	-------	-------	-------	-------
1941: January	30.13	44.6	67.7	26.40	39.1	67.5	34.78	41.4	84.6	-------	-------	-------	-------	-------	-------	-------	-------	-------
1947: July	54.79	41.9	130.1	52.33	43.7	119.8	60.35	40.6	149.0	$54.85	41.6	131.8	$58.43	41.0	142.5	$55.37	40.8	135.6
August	51.91	40.2	129.1	51.22	40.5	126.5	59.52	40.2	148.7	52.82	40.1	131.6	56.35	40.0	140.9	52.22	38.5	135.6
September	56.08	42.2	132.9	51.91	40.6	128.0	63.21	42.1	151.3	54.17	41.0	132.0	60.72	42.0	145.4	54.18	39.5	137.3
October	55.77	42.1	132.5	54.04	42.0	128.8	63.82	42.3	152.3	57.13	42.4	134.6	62.27	42.5	146.9	56.33	40.7	138.3
November	56.88	42.1	135.5	55.54	42.5	130.6	63.29	42.1	151.8	57.96	42.7	135.8	62.17	42.4	146.5	54.41	39.8	136.7
December	58.56	43.1	135.8	55.89	42.9	130.1	65.67	42.9	153.7	60.42	43.7	138.4	63.21	42.9	147.2	57.05	41.2	138.4
1948: January	59.21	43.1	137.4	55.59	42.6	130.5	65.39	42.4	155.7	58.28	42.6	136.9	62.74	42.4	147.6	57.62	41.6	138.6
February	59.50	42.8	139.0	55.68	42.4	131.2	64.11	41.6	155.4	57.69	41.8	138.2	63.14	42.8	147.6	52.55	38.1	137.8
March	61.40	43.7	140.6	54.62	42.0	130.1	65.30	42.2	156.1	56.38	41.2	137.0	63.90	43.0	148.3	55.51	39.9	139.2
April	61.01	43.5	140.3	54.63	42.0	130.1	65.62	42.1	157.3	58.15	42.1	138.3	62.59	42.3	147.2	55.99	40.2	139.1
May	61.28	43.3	141.7	53.31	41.2	129.4	64.55	41.5	157.0	57.39	41.3	139.0	64.89	41.8	155.1	56.72	40.5	140.2
June	62.53	43.3	144.3	53.75	41.2	130.5	66.43	41.5	161.4	59.29	41.8	141.7	66.80	42.5	156.6	59.47	40.5	146.7
July	60.61	42.1	144.0	54.62	41.5	131.7	67.45	41.5	163.9	57.05	39.5	144.5	68.47	43.5	157.5	57.64	39.1	147.6

Transportation equipment, except automobiles

Year and month	Total: Transportation equipment, except automobiles			Locomotives			Cars, electric- and steam-railroad			Aircraft and parts, excluding aircraft engines			Aircraft engines			Shipbuilding and boatbuilding		
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$30.51	38.9	78.5	$28.33	36.7	77.1	$26.71	36.0	74.1	$30.34	41.5	74.5	$36.58	44.1	83.5	$31.91	38.0	83.5
1941: January	35.69	43.1	82.8	34.79	42.8	81.4	29.57	38.5	76.8	34.13	44.7	77.6	42.16	47.2	89.2	37.69	42.0	89.3
1947: July	56.02	40.1	139.5	59.26	39.7	149.4	56.83	41.7	136.4	54.48	39.7	137.2	56.19	39.2	143.5	56.77	39.9	142.1
August	55.75	39.6	140.6	61.75	40.6	152.2	51.89	38.6	134.3	55.30	40.0	138.1	56.58	39.2	144.3	56.93	39.3	144.7
September	56.54	39.7	142.4	64.69	41.3	156.7	55.03	39.9	137.8	54.44	39.3	138.6	58.43	40.0	146.0	57.71	39.5	146.2
October	58.07	40.4	143.7	62.32	40.6	153.4	58.09	41.4	140.4	56.01	40.2	139.5	59.19	40.5	146.1	59.31	39.8	149.0
November	56.42	38.6	146.2	61.64	39.8	154.9	57.61	40.4	142.5	55.48	39.3	141.3	57.52	39.4	146.1	55.20	36.1	152.9
December	59.79	40.8	146.5	63.63	40.7	156.5	59.84	41.4	144.7	57.12	40.6	140.6	60.39	41.2	146.5	61.74	40.5	152.5
1948: January	59.56	40.3	147.9	62.34	40.1	155.3	58.51	40.7	143.9	55.53	39.4	140.8	59.30	40.6	146.1	64.05	40.9	156.7
February	58.67	39.6	148.2	61.01	39.2	155.5	58.02	40.2	144.2	56.13	39.9	140.6	58.29	40.1	145.2	61.54	38.9	158.2
March	59.40	40.3	147.2	63.46	40.2	157.9	58.90	40.9	143.9	56.71	40.1	141.4	59.53	40.6	146.7	62.07	40.3	153.9
April	59.89	40.5	147.8	64.96	40.5	160.4	58.70	40.9	143.7	57.75	40.6	142.1	60.33	40.5	149.1	62.04	40.2	154.1
May	59.30	40.0	148.1	64.57	40.1	161.0	58.07	40.2	144.6	57.74	40.4	142.8	61.02	40.9	149.4	60.40	39.4	153.1
June	59.27	39.8	148.9	64.58	39.7	162.6	58.46	39.9	146.7	57.99	40.4	143.6	62.14	40.6	153.2	59.76	39.2	152.5
July	58.88	39.2	150.1	64.00	38.4	166.5	56.19	38.3	146.6	57.80	39.9	144.7	64.79	40.6	159.4	59.49	38.8	153.1

Transportation equipment, except automobiles—Con.

Year and month	Motorcycles, bicycles, and parts			Automobiles			Nonferrous metals and their products: Total: Nonferrous metals and their products			Smelting and refining, primary, of nonferrous metals			Alloying; and rolling and drawing of nonferrous metals, except aluminum			Clocks and watches		
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	-------	-------	-------	$32.91	35.4	92.9	$26.74	38.9	68.7	$26.67	38.2	69.9	$28.77	39.6	72.9	$22.27	37.9	58.7
1941: January	-------	-------	-------	37.69	38.9	96.9	30.47	41.4	73.6	29.21	38.7	75.5	35.96	44.0	81.8	23.90	38.9	61.4
1947: July	$56.35	42.3	133.3	56.44	37.7	149.6	51.12	39.7	128.9	53.89	41.3	130.4	54.13	39.2	138.1	44.58	39.1	114.0
August	55.58	41.0	135.5	55.76	37.2	150.0	51.07	39.5	129.4	53.98	40.8	132.2	52.62	38.0	138.4	45.03	39.1	115.1
September	55.94	41.0	136.6	59.35	39.2	151.5	52.62	40.2	130.9	55.82	41.2	135.5	54.37	38.9	139.6	46.87	40.4	116.0
October	58.94	42.5	138.8	60.30	39.5	152.6	53.59	40.8	131.2	54.89	40.9	134.2	55.19	39.4	140.1	47.54	40.8	116.7
November	58.94	42.0	140.4	61.30	39.8	154.0	54.27	41.1	132.0	55.69	41.2	135.1	55.93	39.7	141.0	48.64	41.4	117.5
December	58.96	42.3	139.3	64.64	41.4	156.3	55.53	41.8	132.7	55.44	41.2	134.6	57.26	40.5	141.2	48.69	41.9	116.4
1948: January	55.33	40.3	137.3	60.96	39.6	153.8	55.06	41.2	133.6	55.85	41.1	136.0	57.30	40.4	141.8	47.63	40.2	118.5
February	55.65	39.8	140.0	59.00	38.1	154.8	55.07	41.2	133.8	55.58	41.0	135.7	57.73	40.6	142.2	48.59	41.0	118.6
March	55.88	40.4	138.4	59.81	38.9	153.9	55.23	41.1	134.4	55.31	40.5	136.6	58.25	40.8	142.9	49.15	41.1	119.6
April	56.36	40.3	139.8	59.14	38.6	153.3	54.87	40.9	134.3	56.49	41.1	137.5	56.84	40.0	142.2	49.09	40.8	120.5
May	55.54	39.4	141.0	54.44	35.2	154.8	54.96	40.6	135.5	57.33	41.5	138.0	57.42	40.1	143.1	48.27	40.1	120.5
June	54.07	37.5	144.2	61.23	38.1	160.9	55.90	40.8	136.9	57.96	41.3	140.3	59.35	41.2	144.0	48.89	40.1	121.9
July	53.94	37.6	143.5	64.37	39.3	164.0	56.35	40.1	140.5	59.75	41.2	144.9	61.61	40.8	151.1	48.96	39.8	123.0

See footnotes at end of table.

TABLE C–1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Co

MANUFACTURING—Continued

Nonferrous metals and their products—Continued

Year and month	Jewelry (precious metals) and jewelers' findings			Silverware and plated ware			Lighting equipment			Aluminum manufactures		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*
1939: Average	$26.36	39.4	66.0	$26.03	40.7	64.3	$25.73	37.1	69.3	$27.49	39.3	69.9
1941: January	26.43	39.1	66.4	27.37	41.4	66.6	28.19	39.3	71.7	32.85	42.0	78.2
1947: July	44.44	39.0	114.7	58.72	45.3	130.0	47.74	36.7	130.2	48.86	38.4	127.2
August	46.40	39.8	117.2	57.20	44.1	129.9	48.78	37.4	130.5	49.34	38.9	126.6
September	50.32	42.0	120.4	60.93	46.1	132.1	50.02	38.4	130.4	49.74	38.6	128.7
October	52.97	43.6	122.2	61.31	46.4	132.1	51.73	39.3	131.7	52.02	39.7	130.0
November	53.39	42.7	125.5	61.65	45.9	134.4	52.51	40.0	131.4	52.15	39.8	130.9
December	55.53	44.4	125.4	63.80	47.2	135.3	54.11	40.5	133.6	52.86	40.1	132.0
1948: January	51.69	41.9	123.7	62.54	46.3	135.4	53.92	39.8	135.6	53.35	40.2	132.9
February	52.98	43.6	124.9	62.52	46.1	135.6	52.86	39.3	134.5	52.75	39.6	133.0
March	52.17	42.2	123.7	63.81	46.5	137.4	53.22	39.2	135.9	52.05	39.4	132.2
April	51.31	41.2	124.6	62.09	45.7	136.0	52.90	38.8	136.4	52.53	39.7	132.3
May	50.59	39.8	127.1	62.00	45.5	136.3	51.75	37.7	137.3	52.83	39.7	133.2
June	52.10	40.9	127.4	62.24	45.5	136.7	53.19	37.5	141.9	52.13	39.1	133.3
July	49.30	39.8	124.0	58.55	43.7	134.0	56.54	38.7	146.2	52.52	37.1	141.6

Nonferrous metals and their products—Continued / Lumber and timber basic products

Year and month	Total: Lumber and timber basic products			Sawmills and logging camps		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*
1939: Average	$19.06	39.0	48.9	$18.29	38.4	47.6
1941: January	20.27	38.9	52.1	19.59	38.4	51.0
1947: July	43.57	42.2	103.3	42.86	42.1	101.8
August	45.32	43.3	104.8	45.05	43.1	104.6
September	45.41	42.8	106.2	44.58	42.5	104.9
October	45.23	42.6	106.3	44.09	42.2	104.5
November	45.30	42.2	107.4	44.27	41.9	105.6
December	45.65	43.2	105.6	44.20	42.8	103.3
1948: January	44.49	42.4	105.0	42.94	42.0	102.2
February	45.01	41.7	108.0	43.41	41.1	105.6
March	45.32	42.3	107.1	43.86	42.0	104.6
April	45.59	42.1	108.3	43.99	41.6	105.7
May	47.39	42.5	111.5	46.23	42.2	109.6
June	49.42	43.6	113.4	48.58	43.5	111.6
July	49.09	42.7	115.1	48.34	42.6	113.6

Lumber and timber basic products—Con. / Furniture and finished lumber products / Stone, clay, and glass products

Year and month	Planing and plywood mills			Total: Furniture and finished lumber products			Furniture			Caskets and other morticians' goods			Wood preserving			Total: Stone, clay, and glass products		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$22.17	41.1	54.0	$19.95	38.5	51.8	$20.51	38.9	53.0	-------	-------	-------	-------	-------	-------	$23.94	37.6	63.7
1941: January	22.51	40.5	55.4	20.90	38.7	54.0	21.42	39.0	55.2	-------	-------	-------	-------	-------	-------	25.02	37.4	66.9
1947: July	46.58	42.6	109.3	43.51	41.1	105.8	44.12	40.9	107.9	$44.32	40.2	110.3	$41.05	41.6	97.8	48.00	40.1	119.6
August	48.89	44.2	110.7	44.09	41.2	107.0	44.58	41.0	108.9	45.69	40.6	112.2	42.10	42.0	100.1	49.06	40.6	120.8
September	48.94	43.8	111.8	45.38	41.5	109.3	46.24	41.4	111.7	47.06	41.6	112.8	42.41	42.2	100.5	49.57	40.4	122.7
October	50.12	44.3	113.2	46.53	42.1	110.5	47.76	42.3	113.0	47.00	41.1	113.9	42.19	41.5	101.7	50.38	40.8	123.6
November	49.60	43.2	114.7	46.32	41.8	110.8	48.07	42.3	113.7	47.35	40.9	115.0	39.98	39.7	100.7	50.47	40.5	124.7
December	51.61	44.8	115.1	47.72	42.7	111.7	49.10	42.9	114.5	49.01	42.2	115.7	40.50	39.8	101.7	51.00	41.0	124.4
1948: January	50.67	43.9	115.2	47.02	41.9	112.2	48.54	42.2	115.1	48.52	41.8	115.7	39.71	39.2	101.4	50.10	40.0	125.3
February	51.31	43.8	117.1	46.68	41.4	112.7	48.38	41.9	115.5	48.85	41.8	115.5	36.95	35.8	103.1	49.98	39.8	125.9
March	51.06	43.8	116.6	47.08	41.8	112.6	48.58	42.1	115.6	49.21	42.3	115.6	39.59	38.6	102.6	51.41	40.8	126.0
April	51.94	44.0	118.1	46.34	41.0	113.1	47.64	41.1	116.1	48.23	41.3	116.7	41.09	39.8	103.3	51.77	40.7	127.2
May	52.53	43.9	119.7	46.39	40.8	113.6	47.60	40.8	116.7	47.48	40.7	116.5	42.29	40.3	105.0	52.30	40.7	128.6
June	53.18	43.8	121.3	46.54	40.6	114.5	47.57	40.6	117.4	47.61	40.6	117.2	42.45	40.4	105.0	52.41	40.6	129.1
July	52.51	43.1	121.8	46.35	40.3	115.2	47.04	40.0	117.8	47.37	40.0	117.7	42.97	40.4	106.5	51.50	39.4	130.6

Stone, clay, and glass products—Continued

Year and month	Glass and glassware			Glass products made from purchased glass			Cement			Brick, tile, and terra cotta			Pottery and related products			Gypsum		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$25.32	35.2	72.1	-------	-------	-------	$26.67	38.2	69.9	$20.55	37.8	54.3	$22.74	37.2	62.5	-------	-------	-------
1941: January	28.02	36.3	77.2	-------	-------	-------	26.82	37.9	70.9	21.74	36.9	58.7	22.92	36.4	63.5	-------	-------	-------
1947: July	49.34	38.6	128.1	$40.87	39.6	103.1	51.72	41.9	123.5	45.25	40.5	111.3	44.86	37.9	119.2	$54.91	46.1	119.3
August	50.40	39.5	128.0	41.88	40.2	104.2	52.93	42.5	124.4	46.06	40.9	112.1	46.48	38.8	120.1	55.39	45.7	121.2
September	51.57	39.2	131.7	42.91	40.1	107.1	52.68	41.8	126.1	46.51	40.9	113.3	46.14	38.5	120.7	54.68	45.0	121.5
October	52.27	39.4	132.8	44.41	41.1	108.1	52.32	42.0	124.5	47.37	41.3	114.3	48.18	39.6	122.1	56.70	45.9	123.6
November	53.05	39.2	135.4	43.87	40.4	108.5	52.19	41.9	124.5	46.81	40.5	114.8	48.25	39.4	122.7	56.35	45.3	124.3
December	53.07	39.5	134.4	46.16	42.3	109.2	51.94	42.0	123.7	47.46	41.2	114.6	48.55	39.2	123.8	56.53	45.6	124.1
1948: January	52.49	38.0	138.3	44.48	41.1	108.3	51.21	41.4	123.7	46.74	40.5	115.0	47.32	38.2	123.4	55.94	45.3	123.6
February	53.00	38.8	136.8	44.18	40.0	110.5	51.07	41.7	122.6	45.52	38.9	116.3	46.98	38.5	123.0	54.58	44.4	122.9
March	54.42	40.0	136.2	43.96	40.5	108.5	51.72	42.0	123.1	47.54	40.5	116.6	48.17	39.4	123.3	55.71	45.0	123.7
April	54.12	39.9	135.5	43.16	39.6	108.9	53.27	42.0	126.9	48.39	40.6	118.6	48.45	39.2	124.9	58.98	46.8	126.1
May	53.44	39.3	136.0	44.37	40.4	109.9	55.85	42.6	131.1	49.75	41.1	120.6	48.09	38.7	126.3	60.17	47.2	127.5
June	53.32	39.2	136.1	44.25	40.1	110.4	56.38	42.7	132.1	49.66	40.8	121.0	48.42	38.6	127.2	59.91	46.2	129.8
July	50.90	37.0	137.6	42.37	37.7	112.3	56.48	42.0	134.9	50.70	40.2	122.7	47.65	37.8	129.7	59.14	44.5	133.6

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con.

MANUFACTURING—Continued

Year and month	Stone, clay, and glass products—Continued									Textile-mill products and other fiber manufactures					
	Lime			Marble, granite, slate, and other products			Abrasives			Asbestos products			Total: Textile-mill products and other fiber manufactures			Cotton manufactures, except smallwares		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	-------	-------	-------	$26.18	36.9	71.4	-------	-------	-------	$24.43	39.0	62.7	$16.84	36.6	46.0	$14.26	36.7	38.9
1941: January	-------	-------	-------	24.29	34.6	70.8	-------	-------	-------	27.26	41.3	66.0	18.01	36.9	48.8	15.60	37.2	41.9
1947: July	$47.23	44.9	104.2	45.48	42.1	107.9	$50.00	39.3	127.3	54.90	43.3	126.8	39.48	38.4	102.8	37.21	38.3	97.3
August	48.90	44.8	106.9	46.61	41.4	112.6	51.26	39.2	130.6	53.53	42.2	127.7	39.44	38.2	103.2	37.50	38.4	97.7
September	49.23	45.0	108.1	47.56	42.2	112.7	54.57	40.3	135.6	52.30	41.3	126.6	41.39	39.5	104.8	38.55	39.2	98.5
October	51.96	46.1	108.5	48.60	42.5	114.3	54.30	40.4	134.5	52.57	41.3	127.3	41.94	39.7	105.5	39.22	39.6	99.1
November	50.33	45.8	108.9	46.27	40.2	115.2	55.68	40.7	137.0	54.05	41.9	129.2	43.73	40.1	109.0	42.47	40.4	105.1
December	50.48	46.4	108.5	48.68	41.9	116.0	60.68	44.0	137.3	53.85	41.8	128.9	45.15	41.0	110.0	43.64	41.1	106.1
1948: January	49.10	44.2	109.4	46.89	40.6	115.3	59.07	44.4	133.1	53.98	41.4	130.5	45.19	40.5	111.5	43.81	40.7	107.7
February	47.86	43.7	109.1	46.23	40.4	114.6	58.38	42.6	137.2	54.04	40.9	132.2	45.79	40.2	113.9	43.43	40.1	108.3
March	50.58	45.8	110.2	47.57	40.9	116.2	60.62	42.6	142.4	54.49	41.3	131.8	46.32	40.6	114.0	43.98	40.7	108.1
April	52.08	46.3	112.7	47.97	40.9	116.0	59.02	41.5	142.3	55.11	41.2	133.8	45.46	39.9	113.8	43.08	40.1	107.6
May	52.41	46.1	113.6	49.44	41.3	119.3	61.04	41.9	145.7	55.45	41.3	134.0	45.22	39.6	114.2	42.64	39.6	107.8
June	53.32	45.9	115.3	49.35	40.9	119.8	61.32	42.1	145.7	56.66	41.7	135.2	45.29	39.5	114.7	42.00	39.1	107.5
July	52.46	44.4	116.9	48.22	39.8	121.0	57.90	41.0	140.6	57.61	41.7	137.3	44.15	38.6	114.5	40.63	38.0	107.0

Textile-mill products and other fiber manufactures—Continued

Year and month	Cotton smallwares			Silk and rayon goods			Woolen and worsted manufactures, except dyeing and finishing			Hosiery			Knitted cloth [2]			Knitted outerwear and knitted gloves		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$18.22	39.0	47.4	$15.78	36.5	42.9	$19.21	36.4	52.8	$18.89	35.6	53.6	$18.15	38.4	46.8	$17.14	37.0	46.1
1941: January	19.74	39.3	50.3	16.53	35.7	46.1	21.78	37.9	57.6	18.51	33.8	55.0	19.90	37.9	50.3	17.65	35.8	48.9
1947: July	39.68	39.1	101.6	41.17	40.3	102.3	45.33	39.1	116.0	36.37	35.3	103.0	40.91	40.8	99.1	34.51	36.8	92.6
August	38.58	38.2	100.9	41.65	40.0	104.3	42.28	36.6	115.6	38.08	36.8	103.4	41.11	40.7	100.1	35.42	37.6	92.6
September	40.67	39.7	102.4	43.23	40.9	105.7	46.99	40.2	116.9	39.48	37.7	104.9	41.71	40.5	102.7	35.86	37.5	95.1
October	40.49	39.1	103.5	43.57	41.0	106.2	46.70	39.7	117.8	41.00	38.3	106.9	42.21	41.1	102.1	38.01	38.8	96.9
November	40.13	38.7	103.6	44.84	41.2	108.8	46.95	39.6	118.8	42.11	38.7	108.7	42.53	40.8	103.5	38.30	38.7	98.0
December	42.35	40.5	104.5	46.48	42.3	110.0	49.12	41.2	119.2	42.95	39.1	109.8	44.18	41.9	104.5	38.02	38.5	97.8
1948: January	43.15	40.3	107.1	47.55	41.9	113.7	48.79	40.8	119.5	41.76	37.9	110.3	44.65	42.1	106.2	37.94	37.7	99.2
February	43.23	40.4	107.2	47.92	41.8	114.7	52.82	40.8	130.3	41.72	37.6	110.8	45.23	41.9	107.9	39.18	38.7	100.1
March	43.31	40.2	108.0	48.53	42.2	115.1	53.49	40.7	131.3	42.80	38.6	110.8	45.84	41.9	109.4	39.08	38.6	100.4
April	43.03	39.6	108.7	48.31	41.8	115.6	52.33	39.9	131.1	41.61	37.4	111.2	44.39	41.4	107.2	38.73	38.4	100.7
May	42.72	39.3	108.9	48.38	41.8	115.7	52.61	40.1	131.4	41.14	36.7	112.0	42.79	39.7	107.8	39.00	38.5	101.2
June	43.98	39.8	110.6	48.47	41.8	115.9	53.10	40.3	132.0	42.01	36.6	114.6	43.94	40.7	107.9	38.84	38.3	100.4
July	43.48	39.3	110.7	47.69	41.6	114.7	52.31	39.5	132.7	41.64	36.1	115.1	44.21	40.5	109.1	37.28	37.2	98.7

Textile-mill products and other fiber manufactures—Continued

Year and month	Knitted underwear			Dyeing and finishing textiles, including woolen and worsted			Carpets and rugs, wool			Hats, fur-felt			Jutegoods, except felts [3]			Cordage and twine		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$15.05	36.9	41.0	$20.82	38.6	53.5	$23.25	36.1	64.4	$22.75	32.2	70.7	-------	-------	-------	-------	-------	-------
1941: January	16.06	36.0	44.6	21.65	39.3	55.1	25.18	37.3	67.5	27.12	36.2	75.5	-------	-------	-------	-------	-------	-------
1947: July	34.65	38.4	90.2	44.37	40.1	110.4	49.80	40.6	122.8	47.47	36.5	130.2	$37.92	41.0	94.1	$38.71	38.2	101.4
August	34.60	38.2	90.4	45.31	40.5	111.6	47.43	39.4	120.6	45.67	34.7	131.2	36.40	41.0	90.8	39.10	38.6	101.4
September	36.30	39.5	91.8	47.89	41.9	114.2	52.38	41.0	127.9	47.44	35.9	133.4	37.51	41.4	90.6	40.00	38.8	103.0
October	36.50	39.3	93.0	47.16	41.5	113.6	53.53	41.4	129.5	48.33	37.0	131.1	37.27	41.1	90.6	41.70	40.1	104.1
November	37.41	39.5	94.7	48.16	41.2	116.7	53.99	41.6	130.1	47.10	36.2	130.3	37.60	41.5	90.6	42.55	40.4	105.3
December	38.17	40.2	95.1	50.25	42.7	117.5	54.91	42.2	130.6	51.52	39.1	132.1	38.21	41.2	92.7	44.13	41.3	106.8
1948: January	37.77	39.4	95.9	51.04	42.3	120.4	55.23	41.9	132.2	50.17	37.8	132.8	41.75	40.8	102.4	44.63	41.3	108.1
February	37.76	38.9	96.9	51.80	42.2	122.7	55.35	42.0	131.9	51.79	38.7	132.8	42.28	40.1	105.3	44.44	40.8	109.1
March	38.89	39.5	98.1	51.85	42.3	122.7	55.79	42.1	132.7	50.36	37.2	134.8	42.44	40.0	106.0	43.65	40.6	107.9
April	38.72	39.1	98.8	51.44	41.8	122.9	55.18	41.4	133.6	48.58	35.3	137.9	42.93	40.6	105.7	42.21	39.1	107.9
May	37.88	38.3	98.7	50.67	41.3	122.6	56.22	41.8	134.8	49.94	36.7	136.4	42.69	40.1	106.4	41.82	38.5	108.4
June	38.09	38.4	99.4	51.05	41.5	122.9	57.86	42.0	138.0	51.72	37.7	137.5	42.65	40.2	106.0	42.68	39.0	109.4
July	36.79	37.3	98.9	48.76	39.9	122.1	57.42	40.7	141.2	49.52	37.1	133.8	42.58	40.6	104.8	41.22	37.8	109.2

See footnotes at end of table.

TABLE C–1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Co

MANUFACTURING—Continued

Apparel and other finished textile products

Year and month	Total: Apparel and other finished textile products			Men's clothing, not elsewhere classified			Shirts, collars, and nightwear			Underwear and neckwear, men's [2]			Work shirts			Women's clothing not elsewhere classified		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$18.17	34.5	52.7	$19.32	33.2	58.1	$13.75	34.6	39.8	$14.18	35.4	40.1	$11.03	35.8	30.9	$19.20	33.9	
1941: January	18.76	33.5	56.0	20.40	33.4	60.7	14.22	33.0	43.1	14.85	33.6	44.2	12.33	33.6	36.7	19.47	33.2	
1947: July	36.50	35.8	102.0	40.17	36.5	109.8	31.24	36.3	86.2	33.79	36.0	93.8	26.56	36.2	73.5	43.81	34.8	
August	36.57	35.2	103.8	38.66	35.1	109.0	30.74	36.0	85.2	31.51	34.5	91.4	25.54	35.4	72.2	45.49	34.6	
September	37.64	36.0	104.6	41.06	36.8	110.6	32.38	36.9	87.8	33.05	35.5	93.2	25.59	34.6	74.0	45.78	35.0	
October	38.78	36.9	105.1	42.78	37.9	112.0	33.42	37.8	88.5	35.00	36.9	94.9	25.15	33.7	74.5	46.91	35.8	
November	37.09	36.4	101.9	42.24	37.5	111.6	33.75	38.0	88.9	35.09	36.5	96.1	24.90	34.1	72.8	43.82	35.3	
December	39.00	37.1	105.2	43.11	37.7	113.6	34.12	38.1	91.8	35.56	37.3	95.3	24.32	34.1	71.2	46.76	36.2	
1948: January	40.00	36.6	109.4	44.11	37.0	117.8	34.45	36.9	92.9	35.03	36.4	95.7	23.73	32.7	72.5	48.52	36.0	
February	40.23	36.7	109.8	44.05	37.1	117.6	34.20	36.8	92.8	34.78	35.5	97.4	25.69	35.6	72.1	49.09	36.1	
March	40.09	36.7	109.2	44.73	37.4	118.8	35.02	37.4	93.4	35.77	36.3	98.4	26.50	36.9	71.8	48.10	36.1	
April	37.61	36.2	104.0	44.31	37.3	117.3	34.39	36.9	92.8	34.35	36.0	95.4	26.85	36.8	73.0	43.20	35.1	
May	37.24	35.8	104.0	43.50	36.8	117.1	33.83	36.3	92.7	34.80	36.8	94.6	27.22	36.5	74.4	43.27	35.1	
June	37.61	35.6	105.5	43.19	36.4	116.9	33.00	35.5	92.5	34.00	36.0	95.0	27.18	36.7	73.9	43.94	35.0	
July	38.80	35.8	108.3	42.84	36.7	115.9	33.14	36.2	92.4	34.54	36.6	95.0	26.67	35.8	74.2	45.91	34.9	

Apparel and other finished textile products—Continued

Year and month	Corsets and allied garments			Millinery			Handkerchiefs			Curtains, draperies, and bedspreads			Housefurnishings, other than curtains, etc.			Textile bags		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$17.15	37.5	45.6	$22.19	33.8	63.6												
1941: January	17.24	35.6	48.2	22.31	30.5	64.8												
1947: July	34.95	37.5	93.5	48.58	36.2	129.8	$31.13	36.3	85.7	$29.09	36.1	81.6	$36.44	38.4	94.5	$35.48	38.3	
August	34.80	36.7	94.2	49.52	36.3	131.4	30.40	35.5	85.7	28.93	36.1	81.1	37.74	38.6	97.7	35.34	37.8	
September	35.75	37.5	95.4	49.74	35.8	134.0	31.85	36.7	86.7	30.64	37.3	83.0	38.33	38.2	99.6	35.86	38.1	
October	36.76	38.5	95.6	53.20	38.2	133.7	32.57	37.5	86.8	31.55	37.5	84.4	38.72	38.3	100.4	36.76	38.9	
November	36.80	38.6	95.5	39.14	31.3	121.3	33.31	37.7	88.4	31.26	37.2	83.9	38.03	38.3	98.3	37.25	38.9	
December	36.89	39.0	94.8	46.03	35.0	125.6	32.55	37.0	88.1	31.28	37.1	84.3	41.34	40.5	101.2	37.60	39.5	
1948: January	37.37	38.0	98.5	53.14	37.3	136.5	30.46	34.4	88.4	31.44	36.8	85.6	38.54	38.2	99.9	37.20	38.9	
February	37.07	37.9	97.9	57.84	39.3	141.5	32.66	36.4	89.7	30.69	35.9	85.4	36.83	37.7	96.5	36.23	38.0	
March	38.14	38.5	99.3	52.77	36.9	139.4	34.21	37.1	92.2	31.40	35.4	88.2	38.29	38.1	100.0	35.80	37.1	
April	37.39	37.8	99.1	49.95	36.0	135.3	33.09	36.1	91.7	30.17	33.1	89.1	38.46	38.2	100.1	36.35	37.2	
May	35.85	35.8	100.3	42.82	31.5	133.3	31.66	34.8	90.9	30.41	32.9	91.2	37.52	37.2	99.8	37.94	38.4	
June	36.58	36.2	101.3	45.14	32.5	135.1	31.40	34.3	91.7	30.67	33.7	91.0	40.19	39.1	101.9	37.86	38.1	
July	36.33	36.3	100.7	50.68	34.6	141.4	30.91	33.9	90.9	30.21	34.2	90.5	38.93	38.1	101.4	38.26	38.8	

Leather and leather products

Year and month	Total: Leather and leather products			Leather			Boot and shoe cut stock and findings			Boots and shoes			Leather gloves and mittens			Trunks and suitcases		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			Cents			Cents			Cents			Cents			Cents
1939: Average	$19.13	36.2	52.8	$24.43	38.7	63.4				$17.83	35.7	50.3						
1941: January	20.66	37.3	55.4	25.27	38.3	66.2				19.58	37.0	53.0						
1947: July	40.30	38.2	105.5	51.11	40.4	126.1	$39.06	38.4	103.1	38.49	37.8	101.8	$32.42	35.6	91.4	$40.62	38.4	
August	40.25	38.1	105.7	51.19	40.0	127.7	39.86	39.1	103.4	38.32	37.7	101.8	32.33	35.7	91.2	42.09	39.4	
September	41.89	39.1	107.2	52.66	41.0	128.3	40.14	39.2	103.2	40.12	38.8	103.5	33.45	36.3	92.7	43.07	39.5	
October	42.18	39.0	108.2	52.52	40.7	128.7	39.19	38.3	103.7	40.41	38.7	104.6	34.43	36.4	94.5	46.15	40.9	
November	41.93	38.3	109.5	52.82	40.6	129.7	38.92	37.2	106.0	39.98	37.8	105.9	33.88	36.3	93.4	47.61	42.2	
December	42.67	39.1	109.2	53.65	41.3	130.0	41.36	39.3	106.3	40.87	38.7	105.6	33.91	36.3	93.1	45.53	40.9	
1948: January	42.63	39.0	109.5	53.06	40.8	129.9	41.36	38.9	107.5	41.09	38.8	105.9	33.75	35.7	94.7	42.33	38.4	
February	42.99	39.0	110.2	53.38	40.5	131.7	41.23	38.4	108.0	41.35	38.8	106.5	33.67	36.0	94.1	45.61	40.6	
March	41.87	37.8	110.6	51.91	39.4	131.5	40.55	37.6	108.6	40.21	37.5	107.1	33.82	36.0	94.0	45.83	40.6	
April	40.34	36.2	111.6	51.59	39.1	131.8	39.90	36.5	110.7	38.09	35.3	108.0	33.18	35.4	93.8	45.35	40.1	
May	39.65	35.5	111.8	52.38	39.4	133.0	39.72	36.3	110.5	36.79	34.3	107.4	34.77	35.2	99.1	45.06	39.6	
June	41.38	37.0	111.8	53.11	39.5	134.5	41.24	37.4	110.8	39.00	36.4	107.4	35.78	35.8	99.9	44.86	39.0	
July	41.55	37.4	111.2	53.39	39.5	135.1	41.09	37.4	110.4	39.42	37.0	106.7	35.01	35.8	98.8	44.42	38.8	

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con.

MANUFACTURING—Continued

Food

Year and month	Total: Food			Slaughtering and meat packing			Butter			Condensed and evaporated milk			Ice cream			Flour		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$24.43	40.3	60.7	$27.85	40.6	68.6	$22.60	46.7	48.4	-------	-------	-------	$29.24	46.2	62.6	$25.80	42.3	60.5
1941: January	24.69	39.0	63.3	26.84	39.3	68.1	22.84	44.6	50.9	-------	-------	-------	29.41	44.2	65.3	25.27	41.0	60.8
1947: July	48.40	43.2	112.1	56.82	44.5	128.2	44.75	47.0	95.5	$50.18	48.1	104.4	49.62	46.7	103.4	57.71	50.5	114.5
August	49.45	43.4	114.0	54.33	43.0	126.7	46.20	47.7	96.4	49.21	47.2	104.2	50.84	46.9	105.2	59.69	50.1	119.3
September	49.04	43.4	112.9	55.31	43.4	127.6	45.65	47.4	96.1	49.66	46.9	105.9	50.12	45.7	105.9	59.91	49.9	120.1
October	49.61	42.8	115.9	54.98	43.2	127.3	45.58	46.3	98.1	49.24	46.5	105.8	49.86	45.5	106.4	59.01	49.0	120.3
November	49.90	42.5	117.3	61.31	46.9	130.5	46.05	46.1	99.5	48.54	45.7	106.2	49.40	44.3	107.2	59.15	48.6	121.8
December	50.93	43.3	117.5	61.57	47.7	129.1	46.98	46.5	100.4	49.32	45.9	107.4	49.87	44.8	107.3	56.45	47.6	118.7
1948: January	49.44	42.0	117.7	57.12	44.8	127.5	45.92	45.9	99.5	50.20	45.5	110.3	50.50	45.3	107.9	54.43	46.4	117.5
February	49.18	41.6	118.1	51.88	40.7	127.7	47.28	46.3	101.1	51.68	45.9	112.5	51.12	45.0	109.3	54.56	45.9	118.9
March	49.36	41.6	118.7	56.62	43.6	130.1	45.92	45.8	101.1	52.28	46.4	112.6	51.44	45.4	109.5	50.99	43.7	116.7
April	50.95	42.4	120.1	68.51	48.1	142.5	47.16	45.6	103.2	53.51	46.7	114.7	50.86	45.3	108.7	53.07	45.3	117.3
May	51.26	42.5	120.7	67.66	46.7	142.4	47.52	45.9	103.3	55.36	47.5	116.5	51.11	45.0	108.6	55.12	46.1	119.6
June	52.08	42.8	121.7	62.14	44.2	137.9	48.42	46.3	104.3	56.66	48.5	116.8	52.22	45.8	110.3	57.73	47.9	120.7
July	51.82	42.6	121.7	59.79	42.9	136.9	49.42	46.7	106.6	56.42	47.6	118.6	53.53	46.2	112.8	60.65	48.5	125.0

Food—Continued

Year and month	Cereal preparations			Baking			Sugar refining, cane			Sugar, beet			Confectionery			Beverages, nonalcoholic		
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	-------	-------	-------	$25.70	41.7	62.1	$23.91	37.6	63.6	$24.68	42.9	58.5	$18.64	38.1	49.2	$24.21	43.6	55.6
1941: January	-------	-------	-------	26.46	41.1	64.4	22.73	35.0	65.0	24.03	36.5	63.0	19.19	37.6	51.1	25.28	42.0	60.2
1947: July	$53.83	43.2	124.6	45.81	42.7	107.4	50.33	45.5	110.5	46.34	39.2	118.4	37.66	37.8	99.8	45.98	45.0	102.0
August	54.32	42.4	128.1	45.52	41.9	109.1	51.89	46.3	112.1	50.88	41.7	122.0	38.39	38.8	99.3	47.89	46.6	103.6
September	51.28	40.5	126.5	46.14	41.9	110.4	50.87	44.0	115.6	51.55	40.8	126.3	41.20	40.4	102.1	47.91	46.0	104.9
October	50.54	39.7	127.3	46.85	41.9	111.5	53.03	45.3	116.8	50.59	44.8	113.0	42.24	41.1	102.9	45.85	44.3	103.9
November	52.05	40.3	129.1	46.26	41.6	111.5	56.39	46.0	122.4	56.47	48.2	117.2	42.24	40.8	103.6	44.60	43.3	103.2
December	54.13	40.8	132.8	47.43	42.3	111.9	48.24	41.2	117.1	53.87	46.1	116.8	42.96	41.5	103.5	45.22	43.7	103.2
1948: January	54.10	40.5	133.5	47.03	41.6	113.1	45.66	38.0	120.1	50.45	39.0	129.3	40.82	39.6	103.4	45.05	43.0	105.5
February	55.58	40.6	136.9	49.30	43.6	113.2	44.66	37.9	111.7	55.30	42.4	130.5	40.45	38.9	104.5	44.99	42.9	104.8
March	52.46	38.7	135.6	47.38	41.9	113.1	49.30	41.0	120.2	50.11	38.7	129.6	40.48	39.1	105.0	44.93	43.0	104.4
April	54.50	39.8	137.0	48.00	42.1	113.8	52.57	43.2	121.7	50.19	*38.4	130.2	40.83	38.6	106.0	45.46	43.7	104.1
May	55.64	40.4	137.7	49.09	42.7	114.8	51.08	41.9	122.0	50.27	37.5	133.9	38.76	37.5	103.6	45.75	43.9	104.1
June	58.00	41.5	139.8	50.03	42.9	116.5	52.88	43.5	121.4	50.20	38.5	130.3	41.56	39.1	106.4	47.27	45.0	105.3
July	57.92	41.7	139.1	50.01	42.7	116.8	57.45	45.4	126.5	50.73	38.4	132.1	41.89	38.8	107.7	49.13	45.8	107.4

Food—Continued

Tobacco manufactures

Year and month	Malt liquors			Canning and preserving			Total: Tobacco manufactures			Cigarettes			Cigars			Tobacco (chewing and smoking) and snuff		
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$35.01	38.3	91.6	$16.77	37.0	46.4	$16.84	35.4	47.6	$20.88	37.2	56.1	$14.59	34.7	41.9	$17.53	34.1	51.4
1941: January	34.57	36.4	95.2	16.67	33.0	51.0	17.89	35.7	50.1	22.38	37.3	60.0	15.13	35.0	43.2	18.60	34.9	53.7
1947: July	67.52	45.1	149.3	39.96	39.9	100.3	37.74	39.6	95.3	44.67	42.2	106.0	31.25	37.4	84.7	38.21	39.9	95.8
August	68.98	45.3	152.3	45.88	42.6	108.3	37.26	39.2	95.1	43.74	41.2	106.1	32.00	37.3	85.3	37.13	40.1	92.8
September	69.54	45.2	153.9	43.69	42.8	102.5	37.33	39.2	95.2	43.36	40.7	106.6	32.42	37.7	85.7	38.39	41.2	93.3
October	66.10	43.5	151.7	44.75	40.9	110.0	37.90	39.7	95.4	43.92	41.3	106.3	33.21	38.3	86.3	37.78	40.6	93.1
November	64.03	42.1	152.3	37.94	35.9	106.2	37.67	39.4	95.6	43.15	40.6	106.3	33.69	38.6	86.8	36.10	38.5	93.9
December	63.54	42.1	151.1	41.14	37.7	109.3	39.16	39.9	98.3	45.45	40.6	111.9	34.24	39.3	86.8	37.16	39.1	95.0
1948: January	61.03	40.4	151.0	41.10	37.3	110.2	37.97	38.6	98.4	44.74	39.4	113.5	32.64	38.1	86.0	35.38	37.1	95.5
February	62.25	40.9	152.0	42.73	38.4	111.8	35.04	36.2	96.8	37.93	33.9	112.0	32.59	37.9	85.7	35.89	37.2	96.5
March	62.57	41.2	151.6	40.77	36.5	112.0	36.52	37.7	96.8	42.99	38.2	112.4	32.12	37.5	85.2	35.78	36.9	97.1
April	65.24	42.5	153.2	41.63	37.0	113.0	37.19	38.2	97.3	44.35	39.6	111.9	32.13	37.4	85.7	36.32	37.1	97.9
May	65.31	42.5	153.7	41.35	36.8	112.5	37.12	37.7	98.4	44.32	38.9	113.9	31.80	36.9	85.8	36.91	37.3	99.1
June	67.77	42.9	157.9	41.16	38.0	109.0	37.86	37.8	100.3	45.84	39.1	117.2	31.73	36.8	86.3	37.93	37.6	100.9
July	71.27	44.1	161.3	41.78	39.0	108.3	38.51	38.0	101.4	46.59	39.8	117.1	32.24	36.7	87.7	37.59	37.1	101.5

See footnotes at end of table.

TABLE C–1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con

MANUFACTURING—Continued

Year and month	Paper and allied products															Printing, publishing, and allied industries		
	Total: Paper and allied products			Paper and pulp			Envelopes			Paper bags			Paper boxes			Total: Printing, publishing, and allied industries		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$23.72	40.1	59.2	$24.92	40.3	62.0	-------	-------	-------	-------	-------	-------	$21.78	40.2	54.7	$32.42	37.4	86.
1941: January	25.16	40.0	62.9	27.02	40.8	66.2	-------	-------	-------	-------	-------	-------	22.26	38.8	57.6	33.49	37.8	88.
1947: July	51.06	42.9	119.0	56.36	44.5	126.6	$44.72	42.1	107.4	$42.30	38.8	109.4	45.44	41.4	109.9	59.37	39.6	149.
August	50.72	42.4	119.6	56.30	44.1	127.6	44.96	41.0	110.7	41.89	38.4	109.3	44.92	40.8	110.4	59.48	39.4	150.
September	51.99	42.9	121.0	57.14	44.5	128.3	47.02	42.2	112.5	42.05	38.2	110.2	46.53	41.6	112.2	61.61	40.2	153.
October	52.22	43.0	121.5	57.10	44.4	128.7	46.97	42.1	112.8	43.67	39.3	111.3	47.37	42.1	112.7	61.62	40.0	154.
November	52.80	43.2	122.2	57.40	44.4	129.2	46.52	41.9	112.0	43.17	39.0	110.6	48.66	42.7	114.3	62.30	40.0	155.
December	53.69	43.8	122.6	58.21	44.9	129.5	47.35	42.2	112.2	45.29	40.7	111.3	49.44	43.3	114.4	63.37	40.4	156.
1948: January	53.20	43.1	123.5	57.75	44.4	130.1	46.50	41.4	113.9	45.23	40.8	111.2	48.35	42.0	115.5	62.41	39.5	157.
February	53.61	43.1	124.5	58.41	44.5	131.0	46.68	41.3	114.6	44.34	39.5	112.0	48.75	41.9	116.7	62.72	39.1	160.
March	53.82	43.1	124.9	58.50	44.5	131.3	46.30	41.1	114.4	45.69	40.7	112.1	49.14	41.8	117.7	63.97	39.5	162.
April	53.36	42.7	125.0	58.02	44.1	131.3	46.26	40.8	114.9	45.14	40.5	111.3	48.32	41.0	118.0	64.62	39.2	164.
May	54.28	42.8	126.9	59.47	44.6	133.4	46.34	40.8	115.0	44.93	39.8	112.6	48.64	40.7	119.9	65.06	39.1	166.
June	55.31	42.8	129.2	60.40	44.1	136.8	47.10	41.2	116.3	46.29	40.8	113.0	50.27	41.6	121.4	65.53	39.1	167.
July	56.06	42.6	131.7	61.42	44.0	140.0	45.87	40.6	115.4	48.61	41.6	116.7	49.95	40.7	122.4	65.06	38.8	167.

Year and month	Printing, publishing, and allied industries—Continued									Chemicals and allied products								
	Newspapers and periodicals			Printing: book and job			Lithographing			Total: Chemicals and allied products			Paints, varnishes, and colors			Drugs, medicines, and insecticides		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$37.58	36.1	100.4	$30.30	38.3	80.4	-------	-------	-------	$25.59	39.5	64.9	$28.48	40.5	70.4	$24.16	39.7	59.
1941: January	38.15	35.4	105.2	31.64	39.6	81.0	-------	-------	-------	27.53	39.9	69.0	29.86	40.3	74.1	24.68	39.3	61.
1947: July	66.53	38.2	171.3	56.77	40.5	140.8	$57.55	40.5	142.1	51.00	40.9	124.7	53.37	42.3	126.3	43.50	39.1	111.
August	67.74	38.5	173.6	55.95	40.0	140.6	57.56	40.1	143.6	51.27	40.9	125.2	53.76	42.1	127.9	45.68	39.9	114.
September	69.40	39.0	175.3	58.32	40.8	143.6	60.51	41.2	146.7	51.81	41.0	126.3	53.55	41.8	128.4	46.43	39.5	117.
October	69.18	38.7	175.8	58.63	40.7	145.1	60.16	41.1	146.2	52.67	41.4	127.3	53.93	41.9	129.0	47.90	40.4	118.
November	69.78	38.6	177.6	59.35	40.7	146.9	62.19	42.4	146.7	53.15	41.3	128.7	55.06	41.9	131.6	47.35	40.0	118.
December	71.45	39.1	179.1	60.22	41.1	147.9	62.91	42.3	148.6	53.73	41.5	129.3	55.11	42.0	131.4	47.90	40.4	118.
1948: January	68.96	37.8	179.7	60.23	40.7	149.3	61.03	40.4	151.1	54.31	41.4	131.1	55.34	42.0	132.1	48.31	40.4	119.
February	70.36	38.3	181.2	60.13	39.8	152.8	60.04	39.8	150.9	54.12	41.1	131.5	55.73	41.8	133.4	48.42	40.2	120.
March	71.32	38.4	184.3	60.96	40.3	152.8	62.92	40.3	156.0	54.15	41.2	131.5	55.71	41.7	133.8	48.44	40.2	120.
April	72.79	38.5	187.0	61.26	39.9	155.1	61.78	39.5	156.5	54.38	41.0	132.7	55.54	41.5	134.4	48.36	39.8	121.
May	73.04	38.4	187.7	61.92	39.8	157.0	63.24	39.5	160.1	55.24	41.0	134.7	57.22	42.2	135.8	48.91	39.4	124.
June	73.36	38.0	190.0	62.25	39.7	157.9	65.00	40.0	161.6	56.62	41.4	136.7	57.84	42.4	136.5	49.22	39.5	124.
July	72.39	37.8	189.4	62.06	39.7	157.6	62.45	38.6	161.8	57.14	41.1	139.0	59.11	42.7	138.7	48.63	38.8	125.

Year and month	Chemicals and allied products—Continued																	
	Soap			Rayon and allied products			Chemicals, not elsewhere classified			Explosives and safety fuses			Ammunition, small-arms			Cottonseed oil		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$28.11	39.8	70.7	$24.52	37.9	64.6	$31.30	40.0	78.4	$29.99	38.8	77.3	$22.68	39.0	61.2	$13.70	44.3	30.
1941: January	29.58	40.0	74.0	27.26	39.2	69.6	33.10	40.3	82.2	31.56	37.8	83.5	24.05	38.6	62.3	15.55	44.6	33.
1947: July	56.30	42.0	134.0	48.69	39.6	123.0	57.73	41.1	140.4	56.47	41.2	137.1	50.42	41.6	121.3	35.29	48.3	73.
August	59.04	43.0	137.4	49.04	40.0	122.6	57.44	40.7	141.0	57.08	41.9	136.1	44.96	41.0	109.8	35.76	48.9	73.
September	62.05	44.0	141.0	49.74	39.6	125.7	57.98	40.5	143.2	57.39	41.6	138.1	52.69	42.1	125.0	36.30	51.0	71.
October	61.58	43.5	141.4	48.71	39.0	124.9	58.46	40.8	143.2	56.65	40.5	140.0	53.13	42.9	123.9	38.84	53.8	72.
November	62.66	44.1	142.0	49.07	39.2	125.2	59.21	40.9	144.8	58.20	40.7	143.0	53.30	43.1	123.8	38.47	52.6	73.
December	65.01	44.7	145.6	49.73	39.2	126.8	60.07	41.2	145.7	57.36	40.0	143.3	53.85	43.3	124.3	38.68	52.9	73.
1948: January	64.69	44.1	146.6	50.30	39.2	128.4	60.80	41.2	147.7	58.85	40.8	144.1	48.09	40.5	118.8	38.86	52.2	74.
February	64.54	43.8	147.5	50.33	39.3	128.0	60.82	41.1	147.9	59.20	41.2	143.8	48.19	40.6	118.7	36.59	48.8	75.
March	62.83	42.8	146.7	50.68	39.5	128.4	60.84	41.0	148.3	58.24	40.5	143.7	49.04	40.7	120.4	37.95	50.3	75.
April	64.29	42.1	152.8	51.29	39.8	128.7	60.97	41.1	148.4	56.47	39.6	142.7	49.37	40.8	120.9	37.50	49.4	75.
May	64.99	42.1	154.3	51.46	39.7	129.6	61.48	41.2	149.3	59.34	40.6	146.2	50.28	41.3	121.8	38.07	49.0	77.
June	65.46	42.1	155.3	51.72	39.8	129.8	63.17	41.9	150.9	61.58	41.9	147.1	51.48	41.2	124.3	37.94	48.0	79.
July	64.88	41.7	155.5	53.38	40.1	133.0	63.49	41.3	153.9	61.65	41.8	147.3	53.05	41.2	127.9	38.77	47.6	81.

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con.

MANUFACTURING—Continued

Year and month	Chemicals and allied products—Con.			Products of petroleum and coal									Rubber products		
	Fertilizers			Total: Products of petroleum and coal			Petroleum refining			Coke and by-products			Roofing materials			Total: Rubber products		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$14.71	35.8	41.2	$32.62	36.5	89.4	$34.97	36.1	97.4	-------	-------	-------	-------	-------	-------	$27.84	36.9	75.4
1941: January	14.89	34.8	42.9	32.46	36.6	88.7	34.46	35.7	97.0	-------	-------	-------	-------	-------	-------	30.38	39.0	77.9
1947: July	37.04	41.8	88.6	60.57	40.5	149.5	64.12	40.7	157.0	$51.34	37.8	136.4	$56.09	44.5	126.0	55.74	38.6	144.5
August	37.17	40.9	90.8	60.62	40.6	149.4	63.12	40.3	156.7	54.15	39.8	136.3	57.17	44.6	128.2	55.92	38.7	144.5
September	38.85	41.8	93.0	61.84	41.0	150.9	64.75	40.7	159.1	53.08	38.6	138.1	57.56	44.7	128.7	57.76	39.9	144.7
October	36.85	40.5	90.9	60.94	40.5	150.5	63.51	39.9	159.3	53.83	39.9	135.0	58.88	45.2	130.2	57.62	40.1	143.8
November	35.53	39.2	90.7	62.54	41.2	151.8	65.86	41.0	160.7	54.06	39.8	135.9	58.74	45.4	130.6	57.99	39.9	145.4
December	36.56	40.7	89.7	63.21	40.8	155.1	66.32	40.3	164.7	54.37	39.7	137.1	60.60	45.5	133.1	59.47	40.9	145.4
1948: January	37.23	41.5	89.7	64.47	40.7	158.6	67.54	39.8	169.9	*56.70	*40.4	*140.4	58.35	44.4	131.4	57.33	39.7	144.4
February	34.96	39.7	88.1	64.58	40.8	158.1	67.64	40.0	168.9	*57.06	*40.9	*139.5	58.67	44.1	133.2	54.70	38.5	142.1
March	36.25	41.6	87.1	64.62	40.6	159.3	67.77	40.1	169.2	56.74	40.3	140.8	59.51	44.3	134.2	53.24	37.8	140.8
April	36.49	41.5	88.0	64.45	40.3	160.0	68.50	40.2	170.4	53.54	38.4	139.5	58.84	44.0	133.8	53.39	37.8	141.2
May	37.40	41.4	90.4	67.16	41.2	163.1	71.14	40.9	174.0	57.01	40.2	141.9	60.66	44.9	135.2	55.45	39.0	142.4
June	39.34	41.2	95.4	67.18	40.7	165.0	70.92	40.3	176.2	57.84	40.3	143.7	61.09	44.7	136.7	57.14	39.7	143.9
July	40.82	42.1	97.0	69.30	40.8	170.0	73.68	40.4	182.7	57.15	39.8	144.2	62.59	45.1	139.3	58.31	39.7	147.0

Year and month	Rubber products—Continued									Miscellaneous industries								
	Rubber tires and inner tubes			Rubber boots and shoes			Rubber goods, other			Total: Miscellaneous industries			Instruments (professional and scientific), and fire-control equipment			Pianos, organs, and parts		
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$33.36	35.0	95.7	$22.80	37.5	60.7	$23.34	38.9	60.5	$24.48	39.2	62.4	-------	-------	-------	-------	-------	-------
1941: January	36.67	37.7	97.5	26.76	41.9	63.9	24.97	39.4	63.9	25.35	39.3	64.5	$35.33	45.7	77.3	-------	-------	-------
1947: July	62.06	37.9	164.0	48.46	40.5	118.7	48.22	39.1	123.2	46.37	39.4	117.8	53.55	40.1	135.0	$51.57	40.8	126.9
August	62.15	37.8	164.0	47.23	39.9	118.3	49.17	39.7	123.7	46.32	39.3	117.7	54.27	39.9	135.3	50.88	40.7	125.9
September	64.75	38.9	166.1	49.92	41.8	119.4	50.40	40.9	123.4	47.91	40.2	119.1	55.00	39.8	136.1	53.81	41.9	129.5
October	63.78	38.7	164.7	51.28	42.4	121.1	51.03	41.4	123.2	48.74	40.6	120.0	55.67	39.9	137.5	52.64	40.8	130.1
November	64.86	38.9	166.1	49.26	40.6	121.3	51.27	41.0	125.2	49.14	40.7	120.7	56.06	40.0	136.9	54.24	41.6	131.8
December	65.74	39.5	165.8	54.72	44.5	123.1	52.93	41.8	126.1	50.21	41.2	121.9	57.99	40.8	139.1	56.25	42.9	132.6
1948: January	62.72	38.2	164.6	51.08	42.1	121.4	51.79	41.1	126.0	49.60	40.4	122.7	59.59	41.2	141.9	52.52	40.4	131.1
February	58.22	36.0	161.3	50.65	41.7	121.4	51.33	40.8	125.8	50.11	40.8	123.0	57.20	40.0	138.8	51.88	40.0	130.5
March	55.54	34.8	159.9	51.42	42.2	121.9	50.60	40.4	125.1	49.84	40.6	122.9	57.54	40.1	140.7	51.82	40.3	128.8
April	56.54	35.3	160.3	50.59	41.7	121.4	50.16	39.9	125.6	49.60	40.4	122.8	58.16	40.5	141.3	52.34	40.8	128.6
May	61.15	37.4	163.6	50.61	41.7	121.4	50.34	40.0	126.0	50.19	40.3	124.4	58.35	40.2	143.0	52.36	40.8	128.6
June	63.96	38.8	165.1	50.69	41.7	121.5	51.15	40.2	127.2	50.90	40.4	126.1	57.73	39.7	143.4	52.11	40.9	128.0
July	66.30	39.3	168.4	52.12	42.3	123.1	51.14	39.4	129.1	49.93	39.4	126.8	56.68	39.7	144.8	51.89	40.6	128.2

NONMANUFACTURING

Mining

Year and month	Coal						Metal											
	Anthracite			Bituminous [3]			Total: Metal			Iron			Copper			Lead and zinc		
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$25.67	27.7	92.3	$23.88	27.1	88.6	$28.93	40.9	70.8	$26.36	35.7	73.8	$28.08	41.9	67.9	$26.39	38.7	68.3
1941: January	25.13	27.0	92.5	26.00	29.7	88.5	30.63	41.0	74.7	29.26	39.0	75.0	30.93	41.8	74.9	28.61	38.2	74.9
1947: July	58.10	37.0	157.5	54.87	31.8	174.0	54.04	41.2	131.1	52.86	39.2	134.8	57.79	44.7	129.4	52.81	40.5	130.4
August	68.51	38.5	178.0	70.23	39.1	178.7	56.09	41.4	135.4	54.09	40.0	135.2	60.01	43.8	136.9	54.75	39.8	137.6
September	67.37	38.2	176.5	71.19	39.1	181.9	57.01	41.6	137.0	54.12	39.6	136.8	61.57	44.2	139.3	56.67	41.0	138.3
October	71.40	40.0	178.4	71.91	39.9	179.8	57.39	42.3	135.6	55.11	40.7	135.5	60.78	44.8	135.7	57.48	41.5	138.6
November	63.43	36.2	175.4	71.77	38.5	185.1	57.55	41.7	138.0	54.83	39.9	137.6	60.49	44.0	137.5	58.58	41.4	141.6
December	67.42	38.4	175.6	75.22	41.2	182.6	58.11	42.7	136.0	54.26	40.3	134.6	62.39	45.5	137.0	60.83	43.3	140.6
1948: January	68.79	39.0	176.4	75.78	40.9	184.7	58.23	42.5	137.1	54.99	40.5	135.6	62.21	45.2	137.7	59.88	42.0	142.5
February	65.78	36.2	181.7	70.54	38.7	182.6	58.79	42.9	137.0	56.40	41.4	136.1	62.84	45.8	137.3	59.16	41.9	141.2
March	71.59	40.3	177.6	74.84	40.6	184.2	57.90	42.4	136.6	56.04	41.3	135.7	61.25	44.7	137.1	59.04	41.6	141.5
April	55.05	32.1	170.8	49.53	27.0	182.1	57.84	42.1	137.3	55.48	40.7	136.4	61.04	44.6	136.9	59.58	41.7	143.0
May	69.89	39.4	177.4	74.08	40.3	184.1	59.26	42.8	138.4	57.91	42.1	137.7	61.73	45.0	137.3	60.27	41.8	144.2
June	68.91	39.4	174.9	73.87	39.9	185.0	58.78	42.4	138.6	57.41	41.5	138.3	61.33	44.5	137.8	60.36	41.7	144.6
July	54.87	31.5	174.0	67.64	34.2	194.1	57.93	40.7	142.5	55.41	40.3	137.6	63.85	43.6	147.0	53.11	35.3	150.0

See footnotes at end of table.

TABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con

NONMANUFACTURING—Continued

Year and month	Mining—Continued						Public utilities											
	Quarrying and nonmetallic			Crude petroleum and natural gas production			Street railways and busses [4]			Telephone [4]			Telegraph [4]			Electric light and power		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$21.61	39.2	55.0	$34.09	38.3	87.3	$33.13	45.9	71.4	$31.94	39.1	82.2	-------	-------	-------	$34.38	39.6	86.6
1941: January	22.06	38.2	57.6	33.99	37.7	88.5	33.63	45.3	73.1	32.52	39.7	82.4	-------	-------	-------	35.49	39.4	90.2
1947: July	51.26	45.2	112.9	60.01	40.6	148.1	57.65	46.3	123.1	46.51	38.4	121.1	$54.88	44.8	122.6	56.99	42.1	137.6
August	52.99	46.1	114.6	59.54	40.1	148.6	58.00	46.6	124.1	46.92	38.7	121.5	55.01	44.8	122.8	57.97	42.4	137.6
September	53.45	46.1	115.6	61.37	40.3	151.0	58.57	46.1	126.5	48.02	39.1	123.0	54.95	44.5	123.4	58.29	42.0	139.6
October	54.44	46.4	116.9	60.51	40.0	149.4	58.69	45.7	126.5	48.77	39.3	124.1	54.92	44.8	122.7	58.44	42.1	139.5
November	53.05	44.6	117.8	62.94	40.9	155.4	58.27	45.4	127.6	49.44	39.5	125.4	55.10	44.0	125.3	60.33	42.4	142.6
December	52.39	44.4	117.6	60.90	39.5	154.3	60.11	46.8	128.8	47.83	39.0	122.9	55.14	43.9	125.7	59.61	42.2	141.6
1948: January	50.92	42.7	118.7	64.53	39.9	162.7	60.73	46.3	129.9	48.20	38.9	124.1	55.81	44.4	125.7	59.87	42.4	142.6
February	50.39	42.1	119.9	65.77	40.4	163.8	62.15	47.7	129.5	47.82	38.7	123.8	56.26	44.5	126.5	59.60	42.2	142.6
March	51.04	42.9	119.0	63.44	39.7	160.5	61.36	47.3	129.5	47.31	38.7	122.3	56.19	44.4	126.7	58.27	41.6	140.6
April	52.83	43.7	120.6	63.96	40.0	159.9	60.10	46.6	129.3	47.56	38.8	122.5	59.45	44.1	134.9	59.10	41.8	142.7
May	54.73	44.4	122.6	65.88	40.2	164.6	60.32	46.8	130.2	48.82	39.4	124.0	62.12	45.0	138.1	59.83	41.7	144.6
June	55.24	44.7	122.5	64.53	39.5	164.0	61.21	46.8	131.5	48.67	39.5	123.2	61.63	45.1	136.7	60.36	41.7	145.6
July	55.36	44.1	125.1	66.82	39.9	168.0	62.01	46.6	133.4	49.34	39.9	123.9	63.10	45.8	137.9	61.40	41.8	147.6

Year and month	Trade																	
	Wholesale			Retail														
				Total: Retail			Food			General merchandise			Apparel			Furniture and house furnishings		
			Cents			*Cents*			*Cents*			*Cents*			*Cents*			*Cents*
1939: Average	$29.85	41.7	71.5	$21.17	43.0	53.6	$23.37	43.9	52.5	$17.80	38.8	45.4	$21.23	38.8	54.3	$28.62	44.5	66.6
1941: January	30.59	40.6	75.6	21.53	42.9	54.9	23.78	43.6	53.7	18.22	38.8	46.6	21.89	39.0	56.0	27.96	43.9	66.6
1947: July	52.22	41.1	125.7	37.99	41.1	100.3	45.07	41.6	106.2	32.59	37.6	85.5	37.82	37.3	99.8	49.51	43.0	119.6
August	52.05	41.1	125.8	38.14	41.0	100.3	45.37	42.1	104.3	32.50	37.2	85.9	36.74	37.1	99.4	49.41	42.6	119.4
September	53.65	41.2	128.1	37.06	40.0	101.2	44.15	40.1	105.1	31.85	36.3	85.4	37.02	36.9	101.1	50.23	42.6	121.1
October	53.68	41.3	128.9	36.74	40.0	101.3	44.08	40.2	105.8	31.59	36.1	86.0	37.20	36.8	102.3	51.43	42.4	124.1
November	54.70	41.4	131.4	37.14	39.5	102.5	44.92	39.6	108.6	31.15	35.5	85.6	37.40	36.5	102.7	52.13	42.5	125.1
December	54.97	41.6	130.0	37.51	39.7	101.6	44.74	39.9	107.9	31.87	36.0	85.3	38.18	37.2	102.4	53.79	43.2	128.8
1948: January	54.36	41.0	130.9	37.62	39.8	104.4	45.46	39.9	110.8	32.09	35.9	88.9	37.68	36.9	100.7	50.62	42.3	125.4
February	55.87	41.1	134.3	38.33	40.0	105.0	46.33	39.7	111.9	32.09	35.7	88.3	37.94	37.3	100.2	53.05	43.9	128.1
March	55.17	40.9	133.4	38.89	39.8	104.4	46.14	39.5	112.3	32.28	35.3	87.8	37.50	36.2	102.5	51.30	43.7	124.2
April	55.84	41.0	134.6	39.27	39.8	105.5	46.66	39.2	115.0	33.17	35.3	89.5	38.23	36.6	103.0	50.24	43.5	126.1
May	56.61	41.2	136.3	39.84	39.9	106.4	47.08	39.6	114.8	34.04	35.2	90.7	38.54	36.5	104.0	50.96	43.4	128.1
June	56.00	41.1	135.3	40.52	40.3	107.0	48.52	40.6	115.9	35.04	35.8	91.5	39.33	36.9	104.9	50.86	43.4	128.1
July	56.54	41.2	136.9	41.19	40.8	107.7	49.44	41.0	116.2	35.67	36.5	91.5	39.48	37.2	104.5	51.27	43.3	128.4

See footnotes at end of table

ABLE C-1: Hours and Gross Earnings in Manufacturing and Nonmanufacturing Industries [1]—Con.

NONMANUFACTURING—Continued

Year and month	Trade—Continued						Finance [7]		Service								
	Retail—Continued																
	Automotive			Lumber and building materials			Brokerage	Insurance	Hotels [8] (year-round)			Power laundries			Cleaning and dyeing		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
			Cents			*Cents*					*Cents*			*Cents*			*Cents*
939: Average	$27.07	47.6	57.1	$26.22	42.7	61.9	$36.63	$36.32	$15.25	46.6	32.4	$17.69	42.7	41.7	$19.96	41.8	49.0
941: January	28.26	46.8	60.6	26.16	41.7	63.4	38.25	37.52	15.65	45.9	33.8	18.37	42.9	42.9	19.92	41.9	48.8
947: July	50.59	45.4	114.6	46.46	42.5	110.5	62.11	52.60	29.36	44.9	65.2	32.95	42.6	76.9	37.34	42.1	89.9
August	51.50	45.5	115.2	48.49	43.0	112.2	58.42	52.55	29.50	45.0	66.0	32.79	42.2	77.1	35.86	40.8	89.2
September	51.55	45.3	115.9	48.24	42.3	113.5	59.32	51.47	29.86	44.1	67.2	33.44	42.4	78.6	37.67	41.9	91.1
October	52.37	45.7	116.5	48.70	42.9	113.6	61.38	51.96	30.45	44.0	68.4	32.97	42.3	78.7	37.70	41.5	91.9
November	52.62	45.3	117.4	47.65	42.1	113.9	64.51	53.98	30.54	44.4	68.7	32.86	41.7	78.6	37.23	40.9	92.5
December	52.71	45.5	116.8	49.03	42.7	114.3	62.85	53.92	30.89	44.1	69.3	33.88	42.6	79.7	37.70	41.5	92.1
948: January	51.66	44.4	117.9	48.19	41.8	115.4	62.35	55.09	30.55	43.9	69.5	33.99	42.3	80.7	37.64	41.4	92.4
February	53.03	45.0	118.6	49.56	42.1	117.4	63.37	56.63	31.19	44.6	69.5	33.54	41.9	80.2	36.55	40.5	92.3
March	52.98	44.6	120.2	49.24	42.5	117.0	62.60	55.51	30.96	44.0	69.5	33.74	42.0	80.5	37.96	41.5	92.4
April	54.53	45.5	121.6	49.64	42.6	117.5	65.76	54.94	31.59	44.2	70.0	34.29	42.2	81.0	39.18	42.1	93.3
May	54.49	45.5	122.0	50.32	42.8	119.3	71.15	56.22	31.70	44.2	70.7	34.22	41.8	81.7	39.13	42.0	93.6
June	54.65	45.5	122.1	51.08	43.2	120.2	69.35	54.90	31.90	44.1	71.2	34.36	41.8	82.3	40.14	42.4	94.7
July	55.03	45.1	123.7	51.31	42.8	121.6	68.12	55.22	31.95	44.1	71.5	34.55	42.2	82.0	39.02	41.7	94.2

[1] These figures are based on reports from cooperating establishments covering both full- and part-time employees who worked or received pay during the pay period ending nearest the 15th of the month. As not all reporting firms supply man-hour data, the average weekly hours and average hourly earnings for individual industries are based on a slightly smaller sample than are average weekly earnings.

For manufacturing, mining, power laundries, and cleaning and dyeing industries, the data relate to production and related workers only. For the remaining industries, unless otherwise noted, the data relate to all nonsupervisory employees and working supervisors. The size of the reporting sample, methods of computation, and additional tables on "real" and "net spendable" weekly earnings are contained in the Bureau's monthly mimeographed release, "Hours and Earnings—Industry Report," which is available upon request. Data for 1939 and January 1941, for some industries, are not strictly comparable with the periods currently presented. All series, by month, are available upon request to the Bureau of Labor Statistics. Such requests should specify the series desired. Data for the two current months are subject to revision without notation. Revised data for earlier months are identified by an asterisk.

[2] New series beginning with month and year shown below; not comparable with data shown for earlier periods:

Knitted cloth.—September 1947; comparable August data are 101.2 cents.

Jute goods, except felts.—September 1947; comparable August data are 89.1 cents.

Underwear and neckwear, men's.—August 1947; comparable July data are $32.42, 35.1 hours, and 92.3 cents.

[3] April 1948 data reflect work stoppages.

[4] Data include private and municipal street-railway companies and affiliated, subsidiary, or successor trolley-bus and motor-bus companies.

[5] Prior to April 1945 the averages of hours and earnings related to all employees except executives; beginning with April 1945 these averages reflect mainly the hours and earnings of employees subject to the Fair Labor Standards Act. At the same time the reporting sample was expanded to include a greater number of employees of "long lines." The April 1945 data are $40.72, 42.9 hours, and 95.2 cents on the old basis, and $37.50, 40.6 hours, and 92.6 cents on the new basis.

[6] Data relate to all land-line employees except those compensated on a commission basis. Excludes general and divisional headquarters personnel, trainees in school, and messengers.

[7] Data on average weekly hours and average hourly earnings are not available.

[8] Money payments only; additional value of board, room, uniforms, and tips, not included.

*Revised.

TABLE C-2: Estimated Average Hourly Earnings, Gross and Exclusive of Overtime, of Production Workers in Manufacturing Industries [1]

[In cents]

Year and month	All manufacturing		Durable goods		Nondurable goods	
	Gross	Excluding overtime	Gross	Excluding overtime	Gross	Excluding overtime
January 1941	68.3	66.4	74.9	72.2	61.0	60.1
January 1945	104.6	97.0	114.4	105.3	89.1	84.0
July 1945	103.3	96.9	112.7	105.2	90.2	85.4
June 1946	108.4	105.3	116.5	113.4	100.3	97.2
1941: Average	72.9	70.2	80.8	77.0	64.0	62.5
1942: Average	85.3	80.5	94.7	88.1	72.3	69.8
1943: Average	96.1	89.4	105.9	97.6	80.3	76.3
1944: Average	101.9	94.7	111.7	102.9	86.1	81.4
1945: Average	102.3	[2] 96.3	111.1	[2] 104.2	90.4	[2] 85.8
1946: Average	108.4	104.9	115.6	112.2	101.2	97.8
1947: Average	122.1	118.2	129.2	125.0	114.5	110.9
1947: July	123.0	119.5	130.5	127.0	115.0	111.6
August	123.6	120.1	131.2	127.5	115.8	112.4
September	124.9	120.9	133.1	128.9	116.5	112.7
October	125.8	121.6	133.7	129.2	117.5	113.7
November	126.8	122.7	134.6	130.2	118.5	114.7
December	127.8	122.8	135.4	129.9	119.6	115.2
1948: January	128.5	124.3	135.5	130.8	121.0	117.3
February	128.7	124.7	135.2	130.9	121.7	118.1
March	128.9	124.8	135.2	130.6	122.0	118.3
April	129.2	125.3	135.7	131.4	122.0	118.4
May	130.1	126.2	136.6	132.4	123.0	119.4
June [3]	131.5	127.5	138.3	134.0	124.2	120.4
July [3]	133.2	129.4	140.6	136.7	125.2	121.6

[1] Overtime is defined as work in excess of 40 hours a week and paid for at time and one-half. The method of estimating average hourly earnings exclusive of overtime makes no allowance for special rates of pay for work done on holidays.

[2] Eleven-month average only; August 1945 excluded because of VJ-day holiday period.

[3] Preliminary.

TABLE C-3: Average Earnings and Hours on Private Construction Projects, by Type of Firm [1]

Year and month	All types, private construction projects			Building construction													
				Total building			General contractors			Special building trades								
										All trades [2]			Plumbing and heating			Painting and decorating		
	Average wkly. earnings [2]	Average wkly. hours	Average hourly earnings	Average wkly. earnings [2]	Average wkly. hours	Average hourly earnings	Average wkly. earnings [2]	Average wkly. hours	Average hourly earnings	Average wkly. earnings [2]	Average wkly. hours	Average hourly earnings	Average wkly. earnings [2]	Average wkly. hours	Average hourly earnings	Average wkly. earnings [2]	Average wkly. hours	Average hourly earnings
1940: Average	(4)	(4)	(4)	$31.70	33.1	$0.958	[3] $30.56	[3] 33.3	[3] $0.918	$33.11	32.7	$1.012	$32.87	34.6	$0.949	$33.05	32.5	$1.016
1941: January	(4)	(4)	(4)	32.18	32.6	.986	[3] 30.10	[3] 32.7	[3] .946	33.42	32.6	1.025	34.16	35.8	.955	31.49	29.7	1.062
1947: July	$63.26	38.4	$1.648	63.60	38.0	1.676	60.08	37.6	1.596	67.99	38.4	1.772	68.63	38.7	1.774	63.52	36.9	1.722
August	64.36	38.6	1.668	64.71	38.2	1.694	61.33	38.0	1.614	69.01	38.5	1.794	69.60	38.9	1.791	66.32	37.4	1.774
September	65.09	38.3	1.697	65.36	37.9	1.723	61.16	37.2	1.646	70.61	38.9	1.816	71.19	39.1	1.819	66.13	37.4	1.767
October	66.03	38.5	1.716	66.36	38.1	1.743	62.25	37.4	1.665	71.32	38.9	1.833	71.98	39.2	1.836	67.29	37.6	1.792
November	64.02	36.9	1.736	64.55	36.6	1.765	60.55	35.8	1.690	69.36	37.5	1.851	71.90	38.4	1.872	63.56	35.0	1.818
December	66.47	38.0	1.748	67.31	37.9	1.774	62.86	37.1	1.695	72.64	38.9	1.865	76.61	40.6	1.887	65.33	36.0	1.812
1948: January	65.73	37.3	1.762	66.28	37.2	1.781	62.05	36.4	1.707	71.43	38.2	1.868	75.79	40.7	1.862	65.79	35.7	1.846
February	66.17	37.0	1.788	66.31	36.7	1.806	62.70	36.3	1.727	70.99	37.3	1.899	74.17	39.1	1.895	65.03	34.7	1.873
March	66.73	37.4	1.786	66.89	37.1	1.805	63.28	36.7	1.724	71.47	37.5	1.905	74.01	39.0	1.897	66.80	35.7	1.870
April	67.25	37.5	1.795	67.31	37.0	1.818	63.62	36.5	1.745	72.08	37.7	1.909	74.64	38.9	1.919	68.29	36.3	1.880
May	67.90	37.5	1.812	68.13	37.1	1.835	64.74	36.5	1.772	72.67	37.9	1.916	75.55	39.1	1.933	69.76	36.6	1.906
June [5]	70.57	38.5	1.835	70.49	37.9	1.858	67.00	37.4	1.789	75.14	38.6	1.948	79.03	40.0	1.976	70.27	36.4	1.930
July [6]	71.02	38.1	1.866	70.84	37.5	1.889	67.23	36.7	1.830	75.59	38.5	1.965	79.13	39.2	2.017	70.63	36.8	1.922

See footnotes at end of table.

BLE C-3: Average Earnings and Hours on Private Construction Projects, by Type of Firm [1]—Con.

Year and month	Building construction—Continued																	
	Special building trades—Continued																	
	Electrical work			Masonry			Plastering and lathing			Carpentry			Roofing and sheet metal			Excavation and foundation		
	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings
Average	$41.18	34.5	$1.196	$29.47	29.8	$0.988	$36.60	28.5	$1.286	$31.23	33.0	$0.947	$28.07	31.8	$0.883	$26.53	30.9	$0.859
January	43.18	36.5	1.184	25.66	25.3	1.012	35.36	27.5	1.287	30.40	31.2	.974	27.60	30.3	.910	23.86	29.1	.820
July	77.17	39.7	1.946	63.26	37.3	1.697	73.14	37.5	1.950	61.97	37.7	1.645	59.58	37.2	1.602	60.33	38.1	1.583
August	76.96	39.3	1.960	65.89	38.2	1.727	75.61	38.0	1.992	65.99	39.5	1.670	60.86	37.4	1.629	63.12	39.1	1.616
September	79.92	40.3	1.985	66.68	38.1	1.752	76.05	38.1	1.995	65.75	39.0	1.684	63.27	37.9	1.669	64.27	39.8	1.613
October	81.87	40.8	2.006	67.19	37.7	1.781	75.60	37.4	2.019	66.55	38.9	1.710	62.48	38.4	1.626	63.51	38.8	1.638
November	79.64	39.9	1.995	65.39	36.0	1.817	73.27	35.3	2.075	66.50	38.4	1.733	57.76	35.4	1.631	60.08	36.7	1.636
December	81.20	40.6	2.000	66.69	36.3	1.836	76.63	36.5	2.100	64.94	37.8	1.718	60.64	37.1	1.634	63.33	37.8	1.676
January	81.62	40.6	2.012	61.51	33.0	1.862	75.84	36.7	2.069	63.94	36.5	1.750	56.54	34.5	1.638	63.79	37.7	1.690
February	82.10	40.0	2.052	59.50	31.6	1.881	74.81	35.9	2.087	61.60	35.2	1.752	55.38	33.7	1.643	64.37	37.3	1.725
March	83.75	40.6	2.064	61.38	32.6	1.883	75.10	36.0	2.087	62.93	35.4	1.778	55.86	34.4	1.622	61.57	36.4	1.689
April	81.76	39.7	2.061	64.61	34.3	1.885	76.61	36.6	2.094	68.41	38.0	1.799	58.33	35.3	1.652	63.40	37.9	1.672
May	81.44	39.7	2.051	66.91	34.8	1.923	79.22	37.1	2.137	69.55	38.8	1.795	59.89	35.9	1.669	65.72	39.3	1.671
June [6]	82.60	39.8	2.075	71.21	36.2	1.967	83.54	38.2	2.185	70.64	39.4	1.794	63.15	36.8	1.717	68.45	40.4	1.695
July [7]	83.04	40.2	2.066	74.48	38.0	1.962	82.42	37.1	2.220	69.83	39.2	1.780	64.18	37.0	1.736	66.57	38.8	1.715

Year and month	Nonbuilding construction											
	Total nonbuilding			Highway and street			Heavy construction			Other		
	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings	Avg. wkly. earnings [2]	Avg. wkly. hours	Avg. hourly earnings
Average	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
January	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
July	$61.76	40.3	$1.533	$58.18	40.6	$1.434	$64.09	40.1	$1.597	$58.49	40.5	$1.445
August	62.82	40.2	1.562	58.57	40.1	1.459	65.53	40.2	1.632	58.92	40.5	1.454
September	63.85	40.2	1.587	59.68	39.9	1.495	66.84	40.1	1.666	58.26	40.9	1.425
October	64.53	40.3	1.602	60.66	40.2	1.510	67.11	40.0	1.676	60.08	41.1	1.461
November	61.67	38.2	1.615	57.55	37.7	1.528	64.03	38.1	1.680	58.50	38.9	1.502
December	62.83	38.4	1.638	60.21	38.4	1.570	65.24	38.4	1.697	58.35	38.2	1.528
January	63.28	37.8	1.676	61.25	37.9	1.618	65.57	37.6	1.745	58.14	38.1	1.524
February	65.42	38.5	1.700	60.96	37.4	1.629	68.78	38.6	1.781	61.24	39.0	1.570
March	65.85	38.9	1.692	60.71	37.7	1.609	68.79	39.3	1.750	62.89	38.9	1.615
April	66.92	39.6	1.691	61.63	38.5	1.601	69.53	39.9	1.743	65.08	39.8	1.637
May	66.72	39.1	1.706	63.09	38.8	1.627	69.30	39.4	1.760	63.86	38.8	1.647
June [6]	70.93	40.9	1.735	67.53	40.8	1.656	74.06	41.5	1.785	66.61	39.5	1.685
July [7]	71.80	40.6	1.770	70.40	42.2	1.669	73.25	40.0	1.830	69.53	40.5	1.717

[1] Covers all contract construction firms reporting to the Bureau during the months shown (over 11,000), but not necessarily identical establishments. The data include all employees of these construction firms working at the site of privately financed projects (skilled, semiskilled, unskilled, superintendents, time clerks, etc.). Employees of these firms engaged on publicly financed projects and off-site work are excluded.

[2] Includes types not shown separately.

[3] Hourly earnings, when multiplied by weekly hours of work, may not exactly equal weekly earnings because of rounding.

[4] Not available prior to February 1946.

[5] Includes general contracting as well as general building maintenance, and other special building data.

[6] Revised.

[7] Preliminary.

D: Prices and Cost of Living

TABLE D-1: Consumers' Price Index [1] for Moderate-Income Families in Large Cities, by Group of Commodities

[1935-39=100]

Year and month	All items	Food	Apparel	Rent	Fuel, electricity, and ice			Housefurnishings	Miscellaneous
					Total	Gas and electricity	Other fuels and ice		
1913: Average	70.7	79.9	69.3	92.2	61.9	(2)	(2)	59.1	
1914: July	71.7	81.7	69.8	92.2	62.3	(2)	(2)	60.8	
1918: December	118.0	149.6	147.9	97.1	90.4	(2)	(2)	121.2	
1920: June	149.4	185.0	209.7	119.1	104.8	(2)	(2)	169.7	
1929: Average	122.5	132.5	115.3	141.4	112.5	(2)	(2)	111.7	
1932: Average	97.6	86.5	90.8	116.9	103.4	(2)	(2)	85.4	
1939: Average	99.4	95.2	100.5	104.3	99.0	98.9	99.3	101.3	
August 15	98.6	93.5	100.3	104.3	97.5	99.0	96.3	100.6	
1940: Average	100.2	96.6	101.7	104.6	99.7	98.0	101.6	100.5	
1941: Average	105.2	105.5	106.3	106.2	102.2	97.1	107.4	107.3	
January 1	100.8	97.6	101.2	105.0	100.8	97.5	104.0	100.2	
December 15	110.5	113.1	114.8	108.2	104.1	96.7	111.3	116.8	
1942: Average	116.5	123.9	124.2	108.5	105.4	96.7	113.9	122.2	
1943: Average	123.6	138.0	129.7	108.0	107.7	96.1	119.0	125.6	
1944: Average	125.5	136.1	138.8	108.2	109.8	95.8	123.4	136.4	
1945: Average	128.4	139.1	145.9	108.3	110.3	95.0	125.1	145.8	
August 15	129.3	140.9	146.4	(3)	111.4	95.2	127.2	146.0	
1946: Average	139.3	159.6	160.2	108.6	112.4	92.4	132.0	159.2	
June 15	133.3	145.6	157.2	108.5	110.5	92.1	128.4	156.1	
November 15	152.2	187.7	171.0	(3)	114.8	91.8	137.2	171.0	
1947: Average	159.2	193.8	185.8	111.2	121.1	92.0	149.5	184.4	
July 15	158.4	193.1	184.7	110.0	119.5	91.7	146.6	184.3	
August 15	160.3	196.5	185.9	111.2	123.8	92.0	154.8	184.2	
September 15	163.8	203.5	187.6	113.6	124.6	92.1	156.3	187.5	
October 15	163.8	201.6	189.0	114.9	125.2	92.2	157.4	187.8	
November 15	164.9	202.7	190.2	115.2	126.9	92.5	160.5	188.9	
December 15	167.0	206.9	191.2	115.4	127.8	92.6	162.0	191.4	
1948: January 15	168.8	209.7	192.1	115.9	129.5	93.1	165.0	192.3	
February 15	167.5	204.7	195.1	116.0	130.0	93.2	165.9	193.0	
March 15	166.9	202.3	196.3	116.3	130.3	93.8	166.0	194.9	
April 15	169.3	207.9	196.4	116.3	130.7	93.9	166.7	194.7	
May 15	170.5	210.9	197.5	116.7	131.8	94.1	168.6	193.6	
June 15	171.7	214.1	196.9	117.0	132.6	94.2	170.1	194.8	
July 15	173.7	216.8	197.1	117.3	134.8	94.4	174.2	195.9	
August 15	174.5	216.6	199.7	117.7	136.8	94.5	178.1	196.3	

[1] The "consumers' price index for moderate-income families in large cities," formerly known as the "cost of living index" measures average changes in retail prices of selected goods, rents, and services weighted by quantities bought in 1934-36 by families of wage earners and moderate-income workers in large cities whose incomes averaged $1,524 in 1934-36.

Bureau of Labor Statistics Bulletin 699, Changes in Cost of Living in Large Cities in the United States, 1913-41, contains a detailed description of methods used in constructing this index. Additional information on the consumers' price index is given in a compilation of reports published by the Office of Economic Stabilization, Report of the President's Committee on the Cost of Living.

Mimeographed tables are available upon request showing indexes for ea of the cities regularly surveyed by the Bureau and for each of the ma groups of living essentials. Indexes for all large cities combined are availab since 1913. The beginning date for series of indexes for individual cities var from city to city but indexes are available for most of the 34 cities since Wo War I.

[2] Data not available.

[3] Rents not surveyed this month.

TABLE D–2: Consumers' Price Index for Moderate-Income Families, by City,[1] for Selected Periods

[1935–39=100]

City	Aug. 15, 1948	July 15, 1948	June 15, 1948	May 15, 1948	Apr. 15, 1948	Mar. 15, 1948	Feb. 15, 1948	Jan. 15, 1948	Dec. 15, 1947	Nov. 15, 1947	Oct. 15, 1947	Sept. 15, 1947	Aug. 15, 1947	June 15, 1946	Aug. 15, 1939
Average	174.5	173.7	171.7	170.5	169.3	166.9	167.5	168.8	167.0	164.9	163.8	163.8	160.3	133.3	98.6
Atlanta, Ga	176.2	(2)	(2)	170.8	(2)	(2)	169.2	(2)	(2)	167.5	(2)	(2)	162.2	133.8	98.0
Baltimore, Md	(2)	(2)	176.1	(2)	(2)	170.9	(2)	(2)	171.3	(2)	(2)	167.8	(2)	135.6	98.7
Birmingham, Ala	179.3	177.0	174.7	173.7	172.7	172.0	172.8	174.4	173.8	171.6	169.7	169.1	166.6	136.5	98.5
Boston, Mass	168.7	168.6	166.1	164.1	163.6	160.8	161.3	163.1	160.4	158.3	157.5	158.6	154.5	127.9	97.1
Buffalo, N. Y	(2)	173.1	(2)	(2)	167.2	(2)	(2)	167.4	(2)	(2)	162.6	(2)	(2)	132.6	98.5
Chicago, Ill	178.8	178.6	176.2	174.9	172.1	169.0	168.8	171.5	170.1	168.3	167.3	168.3	162.7	130.9	98.7
Cincinnati, Ohio	175.7	175.9	173.5	172.3	170.8	169.3	170.1	171.2	170.3	167.1	167.1	166.3	162.2	132.2	97.3
Cleveland, Ohio	179.3	(2)	(2)	173.7	(2)	(2)	171.6	(2)	(2)	166.9	(2)	(2)	163.0	135.7	100.0
Denver, Colo	(2)	172.5	(2)	(2)	168.5	(2)	(2)	167.0	(2)	(2)	160.4	(2)	(2)	131.7	98.6
Detroit, Mich	176.1	175.9	174.5	173.2	171.8	168.7	169.0	170.6	169.0	166.6	166.7	164.2	162.8	136.4	98.5
Houston, Tex	175.2	173.7	172.5	171.5	171.4	170.0	170.4	170.8	169.3	165.8	163.4	162.1	159.7	130.5	100.7
Indianapolis, Ind	(2)	176.5	(2)	(2)	172.5	(2)	(2)	172.3	(2)	(2)	167.8	(2)	(2)	131.9	98.0
Jacksonville, Fla	(2)	(2)	178.3	(2)	(2)	172.8	(2)	(2)	173.9	(2)	(2)	168.5	(2)	138.4	98.5
Kansas City, Mo	(2)	166.3	(2)	(2)	163.3	(2)	(2)	162.4	(2)	(2)	157.9	(2)	(2)	129.4	98.6
Los Angeles, Calif	171.0	170.3	168.8	169.1	169.3	167.4	168.1	167.6	166.0	164.1	161.3	161.6	157.8	136.1	100.3
Manchester, N. H	(2)	178.1	(2)	(2)	172.0	(2)	(2)	172.5	(2)	(2)	166.1	(2)	(2)	134.7	97.8
Memphis, Tenn	(2)	(2)	174.7	(2)	(2)	172.4	(2)	(2)	173.5	(2)	(2)	169.0	(2)	134.5	97.8
Milwaukee, Wis	174.5	(2)	(2)	171.1	(2)	(2)	166.9	(2)	(2)	164.0	(2)	(2)	159.0	131.2	97.0
Minneapolis, Minn	(2)	(2)	171.4	(2)	(2)	167.7	(2)	(2)	166.2	(2)	(2)	162.1	(2)	129.4	99.7
Mobile, Ala	(2)	(2)	173.5	(2)	(2)	169.9	(2)	(2)	170.3	(2)	(2)	164.3	(2)	132.9	98.6
New Orleans, La	179.8	(2)	(2)	176.5	(2)	(2)	177.1	(2)	(2)	173.2	(2)	(2)	168.5	138.0	99.7
New York, N. Y	173.3	172.6	169.1	167.5	167.0	164.3	166.4	167.1	164.9	163.3	161.7	161.9	158.6	135.8	99.0
Norfolk, Va	176.2	(2)	(2)	171.9	(2)	(2)	170.1	(2)	(2)	168.2	(2)	(2)	163.6	135.2	97.8
Philadelphia, Pa	174.8	172.9	172.1	170.4	169.3	165.5	166.6	168.4	166.3	164.2	162.2	163.2	159.5	132.5	97.8
Pittsburgh, Pa	178.3	177.8	175.7	173.5	171.9	170.1	170.1	172.3	170.2	168.1	167.8	168.2	164.9	134.7	98.4
Portland, Maine	(2)	(2)	167.4	(2)	(2)	162.7	(2)	(2)	162.0	(2)	(2)	159.2	(2)	128.7	97.1
Portland, Oreg	(2)	180.3	(2)	(2)	175.8	(2)	(2)	174.4	(2)	(2)	166.5	(2)	(2)	140.3	100.1
Richmond, Va	(2)	168.9	(2)	(2)	163.4	(2)	(2)	165.1	(2)	(2)	161.7	(2)	(2)	128.2	98.0
St. Louis, Mo	(2)	(2)	172.1	(2)	(2)	167.8	(2)	(2)	167.9	(2)	(2)	165.4	(2)	131.2	98.1
San Francisco, Calif	(2)	(2)	174.2	(2)	(2)	171.4	(2)	(2)	168.9	(2)	(2)	165.7	(2)	137.8	99.3
Savannah, Ga	(2)	180.2	(2)	(2)	177.6	(2)	(2)	175.6	(2)	(2)	171.5	(2)	(2)	140.6	99.3
Scranton, Pa	174.7	(2)	(2)	170.2	(2)	(2)	166.5	(2)	(2)	165.2	(2)	(2)	162.8	132.2	96.0
Seattle, Wash	176.2	(2)	(2)	174.3	(2)	(2)	170.7	(2)	(2)	166.2	(2)	(2)	161.8	137.0	100.3
Washington, D. C	169.2	(2)	(2)	166.7	(2)	(2)	163.2	(2)	(2)	161.7	(2)	(2)	159.1	133.8	98.6

[1] The indexes are based on time-to-time changes in the cost of goods and services purchased by moderate-income families in large cities. They do not indicate whether it costs more to live in one city than in another.

[2] Through June 1947, consumers' price indexes were computed monthly for 21 cities and in March, June, September, and December for 13 additional cities; beginning July 1947 indexes were computed monthly for 10 cities and once every 3 months for 24 additional cities according to a staggered schedule.

TABLE D–3: Consumers' Price Index for Moderate-Income Families, by City and Group of Commodities [1]

[1935–39=100]

City	Food		Apparel		Rent		Fuel, electricity, and ice						Housefurnishings		Miscellaneous	
							Total		Gas and electricity		Other fuels and ice					
	Aug. 15 1948	July 15 1948	Aug. 15 1948	July 15 1948	Aug. 15 1948	July 15 1948	Aug. 15 1948	July 15 1948	Aug. 15 1948	July 15 1948	Aug. 15 1948	July 15 1948	Aug. 15 1948	July 15 1948	Aug. 15 1948	July 15 1948
Average	216.6	216.8	199.7	197.1	117.7	117.3	136.8	134.8	94.5	94.4	178.1	174.2	196.3	195.9	152.4	150.6
Atlanta, Ga	215.7	212.4	206.7	(1)	120.0	(2)	148.2	147.2	76.9	77.0	213.8	211.7	200.6	(1)	155.1	(1)
Baltimore, Md	228.9	227.7	(1)	(1)	(2)	(2)	148.1	144.3	121.8	121.2	169.3	163.0	(1)	(1)	(1)	(1)
Birmingham, Ala	219.3	218.0	207.0	205.4	138.7	(2)	135.6	135.6	79.6	79.6	177.3	177.3	192.3	191.7	149.3	143.8
Boston, Mass	208.8	210.2	190.7	188.5	(2)	(2)	152.3	149.4	112.3	112.1	173.6	169.3	186.9	186.4	143.8	142.8
Buffalo, N. Y	213.0	212.9	(1)	197.2	(2)	121.3	139.1	139.1	96.0	96.0	177.4	177.4	(1)	202.3	(1)	152.6
Chicago, Ill	223.6	224.7	200.6	197.8	(2)	(2)	131.0	130.1	83.5	83.5	180.6	178.5	180.4	181.5	152.7	150.9
Cincinnati, Ohio	218.1	220.4	197.5	193.2	(2)	(2)	141.1	141.1	95.1	95.1	185.0	185.0	189.6	191.5	153.0	152.2
Cleveland, Ohio	229.0	226.2	196.3	(1)	124.3	(2)	143.6	142.6	105.6	105.6	179.9	178.0	184.0	(1)	152.2	(1)
Denver, Colo	213.1	217.0	(1)	196.1	(2)	122.6	111.9	109.3	69.2	69.2	160.5	155.1	(1)	217.3	(1)	149.6
Detroit, Mich	210.1	213.2	197.8	194.3	(2)	125.3	149.7	147.3	86.7	86.7	197.4	193.4	207.6	205.5	166.1	163.9
Houston, Tex	223.8	222.1	210.9	208.2	121.1	(2)	98.4	98.4	81.8	81.8	146.1	146.1	199.3	199.1	152.6	151.1
Indianapolis, Ind	217.1	212.6	(1)	191.1	(2)	128.5	154.0	152.1	86.6	86.6	193.6	190.7	(1)	187.8	(1)	138.2
Jacksonville, Fla	220.7	222.8	(1)	(1)	(2)	(2)	147.3	147.3	100.2	100.2	188.1	188.1	(1)	(1)	(1)	(1)
Kansas City, Mo	205.4	204.4	(1)	186.4	(2)	122.2	127.6	127.0	66.7	66.4	183.2	182.4	(1)	183.5	(1)	150.1
Los Angeles, Calif	212.7	213.1	194.8	195.7	123.9	(2)	94.0	94.3	89.3	89.3	116.4	118.0	187.0	185.9	151.7	150.2
Manchester, N. H	217.8	218.4	(1)	191.4	(2)	111.4	155.7	152.8	94.6	94.6	186.2	181.9	(1)	200.0	(1)	144.9
Memphis, Tenn	227.1	229.8	(1)	(1)	(2)	(2)	134.9	128.1	77.0	77.0	166.9	156.4	(1)	(1)	(1)	(1)
Milwaukee, Wis	218.8	218.3	200.8	(1)	116.7	(2)	145.2	141.9	104.5	104.5	173.2	167.6	196.4	(1)	148.7	(1)
Minneapolis, Minn	209.2	208.2	(1)	(1)	(2)	(2)	139.5	138.1	75.8	75.8	180.8	178.5	(1)	(1)	(1)	(1)
Mobile, Ala	222.7	222.5	(1)	(1)	(2)	(2)	129.4	127.8	84.0	84.0	164.7	162.0	(1)	(1)	(1)	(1)
New Orleans, La	228.5	233.2	209.1	(1)	112.1	(2)	113.0	113.0	75.1	75.1	153.2	153.2	192.7	(1)	144.7	(1)
New York, N. Y	216.9	217.9	200.3	196.8	(2)	107.1	132.9	131.0	100.5	100.5	182.5	177.7	186.7	184.1	157.7	155.1
Norfolk, Va	220.5	216.9	196.3	(1)	115.2	(2)	147.8	147.8	97.8	97.8	187.1	187.1	195.3	(1)	150.2	(1)
Philadelphia, Pa	212.5	210.9	194.2	193.3	119.2	(2)	142.6	136.1	103.0	103.0	173.1	161.4	202.7	198.9	149.7	148.2
Pittsburgh, Pa	220.9	222.3	229.1	224.2	(2)	118.5	138.8	137.2	103.4	103.4	199.7	195.5	203.7	203.0	146.5	145.0
Portland, Maine	209.8	209.7	(1)	(1)	(2)	(2)	150.7	145.0	108.5	100.4	171.3	166.8	(1)	(1)	(1)	(1)
Portland, Oreg	234.1	233.7	(1)	194.8	(2)	123.2	127.8	127.2	94.9	95.7	168.1	165.8	(1)	186.4	(1)	153.9
Richmond, Va	211.7	209.4	(1)	198.2	(2)	113.0	142.3	142.3	95.6	95.6	170.8	170.8	(1)	208.4	(1)	141.7
St. Louis, Mo	225.3	224.2	(1)	(1)	(2)	(2)	138.3	137.1	94.1	94.1	177.4	175.2	(1)	(1)	(1)	(1)
San Francisco, Calif	224.3	223.2	(1)	(1)	(2)	(2)	83.1	83.1	72.7	72.7	126.9	126.9	(1)	(1)	(1)	(1)
Savannah, Ga	223.3	228.3	(1)	194.0	(2)	117.0	153.3	151.4	91.2	91.2	189.4	186.3	(1)	202.3	(1)	153.4
Scranton, Pa	217.3	218.2	205.2	(1)	108.1	(2)	144.5	138.3	91.8	91.8	176.7	166.7	184.5	(1)	141.1	(1)
Seattle, Wash	221.9	223.4	195.5	(1)	122.2	(2)	124.2	123.1	91.5	91.5	151.4	149.5	197.2	(1)	154.7	(1)
Washington, D. C	214.9	215.1	219.8	(1)	103.5	(2)	136.9	132.0	98.6	94.4	162.5	157.0	201.1	(1)	152.1	(1)

[1] Prices of apparel housefurnishings, and miscellaneous goods and services are obtained monthly in 10 cities and once every 3 months in 24 additional cities according to a staggered schedule.

[2] Rents are surveyed every 3 months in 34 large cities according to a staggered schedule.

TABLE D–4: Indexes of Retail Prices of Foods,[1] by Group, for Selected Periods

[1935-39=100]

Year and month	All foods	Cereals and bakery products	Meats, poultry, and fish	Meats				Chickens	Fish	Dairy products	Eggs	Fruits and vegetables				Beverages	Fats and oils	Sugar and sweets
				Total	Beef and veal	Pork	Lamb					Total	Fresh	Canned	Dried			
1923: Average	124.0	105.5	101.2	-------	-------	-------	-------	-------	-------	129.4	136.1	169.5	173.6	124.8	175.4	131.5	126.2	175.4
1928: Average	137.4	115.7	117.8	-------	-------	-------	-------	-------	-------	127.4	141.7	210.8	226.2	122.9	152.4	170.4	145.0	120.0
1929: Average	132.5	107.6	127.1	-------	-------	-------	-------	-------	-------	131.0	143.8	169.0	173.5	124.3	171.0	164.8	127.2	114.3
1932: Average	86.5	82.6	79.3	-------	-------	-------	-------	-------	-------	84.9	82.3	103.5	105.9	91.1	91.2	112.6	71.1	89.6
1939: Average	95.2	94.5	96.6	96.6	101.1	88.9	99.5	93.8	101.0	95.9	91.0	94.5	95.1	92.3	93.3	95.5	87.7	100.6
August	93.5	93.4	95.7	95.4	99.6	88.0	98.8	94.6	99.6	93.1	90.7	92.4	92.8	91.6	90.3	94.9	84.5	95.6
1940: Average	96.6	96.8	95.8	94.4	102.8	81.1	99.7	94.8	110.6	101.4	93.8	96.5	97.3	92.4	100.6	92.5	82.2	96.8
1941: Average	105.5	97.9	107.5	106.5	110.8	100.1	106.6	102.1	124.5	112.0	112.2	103.2	104.2	97.9	106.7	101.5	94.0	106.4
December	113.1	102.5	111.1	109.7	114.4	103.2	108.1	100.5	138.9	120.5	138.1	110.5	111.0	106.3	118.3	114.1	108.5	114.4
1942: Average	123.9	105.1	126.0	122.5	123.6	120.4	124.1	122.6	163.0	125.4	136.5	130.8	132.8	121.6	136.3	122.1	119.6	126.5
1943: Average	138.0	107.6	133.8	124.2	124.7	119.9	136.9	146.1	206.5	134.6	161.9	168.8	178.0	130.6	158.9	124.8	126.1	127.1
1944: Average	136.1	108.4	129.9	117.9	118.7	112.2	134.5	151.0	207.6	133.6	153.9	168.2	177.2	129.5	164.5	124.3	123.3	126.5
1945: Average	139.1	109.0	131.2	118.0	118.4	112.6	136.0	154.4	217.1	133.9	164.4	177.1	188.2	130.2	168.2	124.7	124.0	126.5
August	140.9	109.1	131.8	118.1	118.5	112.6	136.4	157.3	217.8	133.4	171.4	183.5	196.2	130.3	168.6	124.7	124.0	126.6
1946: Average	159.6	125.0	161.3	150.8	150.5	148.2	163.9	174.0	236.2	165.1	168.8	182.4	190.7	140.8	190.4	139.6	152.1	143.9
June	145.6	122.1	134.0	120.4	121.2	114.3	139.0	162.8	219.7	147.8	147.1	183.5	196.7	127.5	172.5	125.4	126.4	136.2
November	187.7	140.6	203.6	197.9	191.0	207.1	205.4	188.9	265.0	198.5	201.6	184.5	182.3	167.7	251.6	167.8	244.4	170.5
1947: Average	193.8	155.4	217.1	214.7	213.6	215.9	220.1	183.2	271.4	186.2	200.8	199.4	201.5	166.2	263.5	186.8	197.5	180.0
August	196.5	155.7	228.4	229.8	230.5	229.3	232.1	180.5	262.4	183.8	212.3	199.8	202.1	165.7	263.4	181.7	178.5	179.8
September	203.5	157.8	240.6	241.9	239.7	245.9	244.0	191.4	275.7	195.2	235.9	198.2	202.4	157.3	261.2	187.0	176.6	181.8
October	201.6	160.3	235.5	234.9	233.6	240.9	226.2	189.5	286.5	190.1	232.7	196.6	201.1	155.2	255.6	190.8	190.0	181.8
November	202.7	167.9	227.0	223.6	226.3	219.7	227.1	184.6	302.4	198.4	224.7	199.6	205.0	156.5	251.7	194.7	196.4	183.2
December	206.9	170.5	227.3	223.2	227.6	218.2	221.5	190.7	302.3	204.9	236.1	205.3	212.1	157.3	255.4	198.5	208.2	183.7
1948: January	209.7	172.7	237.5	233.4	239.7	225.9	231.5	200.0	310.9	205.7	213.6	208.3	215.7	158.0	256.8	201.9	209.3	183.4
February	204.7	171.8	224.8	218.0	228.2	202.2	223.4	196.4	315.0	204.4	189.2	213.0	222.0	157.7	256.0	204.0	194.2	176.8
March	202.3	171.0	224.7	218.2	228.5	204.3	216.8	194.7	313.6	201.1	186.3	206.9	214.2	157.7	253.9	204.4	191.7	174.4
April	207.9	171.0	233.8	229.5	241.2	212.3	232.6	198.4	307.2	205.8	184.7	217.4	228.4	156.4	252.1	204.4	191.4	173.6
May	210.9	171.1	244.2	242.0	255.8	219.1	253.5	202.1	305.0	204.8	184.9	218.0	229.4	156.4	250.0	204.6	196.6	173.0
June	214.1	171.2	255.1	255.2	273.9	223.5	271.2	207.6	299.3	205.9	194.2	214.9	225.2	157.4	248.0	205.1	200.5	170.6
July	216.8	171.0	261.8	263.0	280.9	233.8	275.0	209.3	301.6	209.0	204.3	213.4	223.2	157.7	248.0	205.2	200.8	170.9
August	216.6	170.8	267.0	269.3	286.2	246.1	266.6	207.8	304.4	211.0	220.2	199.6	204.8	157.8	249.2	205.3	197.8	172.3

[1] The Bureau of Labor Statistics retail food prices are obtained monthly during the first three days of the week containing the fifteenth of the month, through voluntary reports from chain and independent retail food dealers. Articles included are selected to represent food sales to moderate-income families.

The indexes, based on the retail prices of 50 foods, are computed by the fixed-base-weighted-aggregate method, using weights representing (1) relative importance of chain and independent store sales, in computing city average prices; (2) food purchases by families of wage earners and moderate-income workers, in computing city indexes; and (3) population weights, in combining city aggregates in order to derive average prices and indexes for all cities combined.

Indexes of retail food prices in 56 large cities combined, by commodity groups, for the years 1923 through 1945 (1935–39=100), may be found in Bulletin No. 899, "Retail Prices of Food—1944 and 1945," Bureau of Labor Statistics, U. S. Department of Labor, table 2, p. 4. Mimeographed tables of the same data, by months, January 1935 to date, are available upon request.

TABLE D–5: Indexes of Retail Prices of Foods, by City

[1935–39=100]

City	Aug. 1948	July 1948	June 1948	May 1948	Apr. 1948	Mar. 1948	Feb. 1948	Jan. 1948	Dec. 1947	Nov. 1947	Oct. 1947	Sept. 1947	Aug. 1947	June 1946	Aug. 1939
United States	216.6	216.8	214.1	210.9	207.9	202.3	204.7	209.7	206.9	202.7	201.6	203.5	196.5	145.6	
Atlanta, Ga	215.7	212.4	209.9	207.9	204.7	201.1	205.6	211.9	211.1	206.9	211.1	209.4	198.9	141.0	
Baltimore, Md	228.9	227.7	225.3	221.6	217.8	212.3	214.5	220.2	217.8	211.8	211.5	212.8	206.9	152.4	
Birmingham, Ala	219.3	218.0	212.7	209.6	207.5	207.2	211.1	218.0	217.0	212.7	210.7	210.9	204.8	147.7	
Boston, Mass	208.8	210.2	204.1	199.2	198.2	192.2	195.0	200.3	195.7	192.4	191.8	195.3	187.9	138.0	
Bridgeport, Conn	214.6	214.4	210.3	207.5	201.4	195.6	197.5	204.5	199.0	196.5	195.6	196.8	191.3	139.1	
Buffalo, N. Y	213.0	212.9	211.6	207.9	200.2	196.6	196.7	202.1	200.3	194.8	193.3	196.5	192.4	140.2	
Butte, Mont	215.1	216.6	214.7	207.4	201.3	200.5	202.1	204.8	195.8	194.2	195.0	195.7	193.8	139.7	
Cedar Rapids, Iowa [1]	222.2	224.4	224.3	219.7	217.0	208.2	208.9	214.6	213.0	209.1	208.7	212.0	204.4	148.2	
Charleston, S. C	208.0	211.4	208.1	206.7	204.8	199.1	200.2	206.6	203.1	198.9	201.4	198.0	189.8	140.8	
Chicago, Ill	223.6	224.7	221.3	218.4	212.2	204.3	204.8	213.2	210.5	207.8	207.1	211.0	203.1	142.8	
Cincinnati, Ohio	218.1	220.4	216.3	213.5	210.1	206.1	209.0	213.0	211.6	204.2	206.9	206.7	198.3	141.4	
Cleveland, Ohio	229.0	226.2	223.7	218.0	213.0	209.3	212.5	217.6	212.3	206.1	208.7	211.0	204.3	149.3	
Columbus, Ohio	202.2	201.9	199.2	195.3	193.1	190.8	192.6	196.7	194.4	190.1	192.0	190.0	184.9	136.4	
Dallas, Tex	215.2	213.3	210.8	210.5	206.7	203.0	205.7	210.3	208.2	204.4	201.6	200.3	195.5	142.4	
Denver, Colo	213.1	217.0	216.5	213.3	208.5	202.3	203.4	208.6	205.6	201.0	197.2	199.0	195.8	145.3	
Detroit, Mich	210.1	213.2	211.3	208.0	203.9	197.7	199.4	205.1	202.0	196.7	199.0	197.4	195.5	145.4	
Fall River, Mass	213.5	214.1	211.3	207.2	201.2	197.2	198.4	202.6	199.0	195.0	195.6	195.8	190.0	138.1	
Houston, Tex	223.8	222.1	220.0	218.1	219.3	216.0	218.1	221.5	218.1	210.2	208.7	206.4	200.8	144.0	
Indianapolis, Ind	217.1	212.6	211.5	208.0	205.7	203.8	204.2	208.2	208.8	204.3	204.5	203.0	195.5	141.5	
Jackson, Miss. [1]	220.6	220.8	216.7	218.0	218.3	214.6	221.3	223.3	223.2	213.1	212.6	212.0	209.5	150.6	
Jacksonville, Fla	220.7	222.8	222.9	217.3	214.7	208.1	212.2	216.2	216.6	211.0	214.7	209.1	205.0	150.8	
Kansas City, Mo	205.4	204.4	204.4	202.2	197.9	193.0	192.5	199.4	197.3	194.2	193.5	193.5	183.5	134.8	
Knoxville, Tenn. [1]	244.6	241.7	238.4	236.2	233.9	230.0	239.6	244.3	243.5	235.6	236.9	235.9	225.9	165.6	
Little Rock, Ark	212.4	213.4	210.0	209.2	206.4	203.8	206.1	211.4	211.8	200.4	200.4	201.3	195.1	139.1	
Los Angeles, Calif	212.7	213.1	212.1	212.6	213.9	208.9	210.9	212.2	211.1	206.7	201.9	204.2	195.4	154.8	
Louisville, Ky	207.4	206.8	203.8	201.6	198.2	193.9	198.0	200.1	198.9	195.8	196.2	198.2	189.7	135.6	
Manchester, N. H	217.8	218.4	213.0	208.9	204.9	202.0	203.2	208.8	204.7	199.0	198.0	201.3	196.8	144.4	
Memphis, Tenn	227.1	229.8	226.7	223.2	222.2	219.9	224.5	230.7	229.7	226.2	223.6	220.5	213.5	153.6	
Milwaukee, Wis	218.8	218.3	215.3	213.7	210.9	204.6	203.4	206.4	204.6	200.7	197.6	200.1	196.8	144.3	
Minneapolis, Minn	209.2	208.2	206.2	206.0	203.0	198.1	197.2	202.6	199.3	193.7	194.6	197.2	187.4	137.5	
Mobile, Ala	222.7	222.5	219.8	217.0	216.3	212.2	215.5	219.6	216.3	206.8	209.3	206.8	200.8	149.8	
Newark, N. J	212.6	212.8	209.9	204.7	203.0	196.4	200.3	201.4	199.4	197.4	194.6	196.8	190.0	147.9	
New Haven, Conn	205.6	208.3	205.4	201.2	197.7	193.0	195.8	201.5	198.9	193.4	193.8	196.1	191.2	140.4	
New Orleans, La	228.5	233.2	227.3	223.0	228.7	224.3	225.6	226.4	222.1	220.2	219.5	216.8	211.0	157.6	
New York, N. Y	216.9	217.9	213.9	210.0	208.6	201.2	206.7	209.7	206.1	203.9	200.6	203.0	194.3	149.2	
Norfolk, Va	220.5	216.9	214.4	213.3	210.5	206.0	210.2	216.5	216.1	210.6	214.3	210.7	203.2	146.0	
Omaha, Nebr	211.1	208.6	210.1	207.2	202.5	197.7	197.7	204.2	202.6	198.1	195.6	197.9	191.1	139.5	
Peoria, Ill	230.8	224.9	227.3	223.8	217.0	205.8	208.9	219.5	224.1	220.3	212.3	212.9	211.4	151.3	
Philadelphia, Pa	212.5	210.9	209.4	205.0	202.8	196.3	199.3	205.6	201.8	197.5	196.2	199.8	191.7	143.5	
Pittsburgh, Pa	220.9	222.3	219.6	213.7	209.8	204.8	205.4	212.8	209.6	205.2	206.1	209.8	202.0	147.1	
Portland, Maine	209.8	209.7	204.1	199.4	197.0	192.4	193.5	199.6	195.2	190.7	190.9	193.6	191.0	138.4	
Portland, Oreg	234.1	233.7	228.2	229.5	223.2	220.4	219.2	223.0	219.0	214.2	208.7	209.9	205.0	158.4	
Providence, R. I	227.2	224.9	222.0	217.9	213.1	205.5	210.5	215.0	210.5	206.1	206.5	208.2	200.6	144.9	
Richmond, Va	211.7	209.4	205.3	203.4	200.6	197.6	201.3	209.1	207.6	201.0	205.1	203.8	194.3	138.4	
Rochester, N. Y	209.7	211.2	208.8	205.1	200.8	196.7	196.9	202.1	200.1	194.9	192.3	195.5	192.2	142.5	
St. Louis, Mo	225.3	224.2	222.0	218.2	213.6	210.9	212.8	217.2	215.2	209.9	209.4	215.9	205.0	147.4	
St. Paul, Minn	204.5	204.7	203.7	203.5	200.5	195.3	194.0	198.6	195.9	191.2	191.0	192.1	183.4	137.3	
Salt Lake City, Utah	216.0	217.1	215.8	216.8	212.9	207.3	207.9	211.3	209.7	202.6	199.4	200.7	197.6	151.7	
San Francisco, Calif	224.3	223.2	221.6	223.4	219.5	215.3	215.4	218.9	215.7	214.4	208.8	210.4	200.4	155.5	
Savannah, Ga	223.3	228.3	224.5	223.3	221.4	213.6	219.6	222.9	222.2	217.5	219.2	220.3	215.1	158.5	
Scranton, Pa	217.3	218.2	216.1	212.2	208.9	201.8	203.2	213.1	210.0	202.8	199.1	206.6	199.5	144.0	
Seattle, Wash	221.9	223.4	220.3	221.4	215.5	212.5	214.7	218.4	213.4	207.6	205.4	206.0	200.3	151.6	
Springfield, Ill	227.0	224.9	224.4	219.3	212.6	209.1	211.4	217.9	217.3	213.2	213.6	217.1	211.0	150.1	
Washington, D. C	214.9	215.1	215.4	209.7	205.1	198.9	202.0	209.5	207.4	202.0	200.9	202.9	197.1	145.5	
Wichita, Kans [1]	224.7	226.7	226.4	225.3	220.3	215.9	215.1	222.4	221.6	215.1	213.8	213.8	201.8	154.4	
Winston-Salem, N. C. [1]	215.8	212.9	209.5	208.4	206.0	202.7	207.9	214.5	211.3	207.1	208.4	205.8	199.0	145.3	

[1] June 1940=100.

TABLE D–6: Average Retail Prices and Indexes of Selected Foods

Commodity	Average price Aug. 1948	Indexes 1935–39=100												
		Aug. 1948	July 1948	June 1948	May 1948	Apr. 1948	Mar. 1948	Feb. 1948	Jan. 1948	Dec. 1947	Nov. 1947	Oct. 1947	Sept. 1947	Aug. 1947	Aug. 1939
ls and bakery products:															
Cereals:	*Cents*														
Flour, wheat—5 pounds	47.9	185.7	186.9	188.4	189.4	189.6	192.4	197.3	210.9	209.6	204.8	194.0	189.2	187.0	82.1
Corn flakes—11 ounces	16.7	177.1	176.8	177.2	175.7	175.8	173.3	172.8	172.9	169.3	164.3	157.9	151.7	144.9	92.7
Corn meal—pound	11.1	215.2	215.5	213.7	215.7	216.4	216.6	219.9	219.9	218.1	217.5	211.9	204.5	192.4	90.7
Rice [1]—do	21.6	121.5	120.6	119.6	118.6	118.4	118.1	118.4	117.3	116.9	116.8	114.0	111.5	106.8	(2)
Rolled oats [3]—20 ounces	17.1	155.4	155.2	155.0	154.8	154.8	153.5	153.4	153.6	152.6	151.1	143.4	135.6	130.9	(2)
Bakery products:															
Bread, white—pound	13.9	163.1	163.1	163.5	163.5	163.2	163.1	163.1	162.3	159.8	157.5	149.3	147.9	146.8	93.2
Vanilla cookies—do	44.3	191.7	192.1	190.3	188.8	189.2	187.9	187.7	183.7	180.2	178.7	176.2	176.3	174.9	(4)
ts, poultry, and fish:															
Meats:															
Beef:															
Round steak—do	101.2	299.5	294.4	287.6	267.3	250.7	234.0	231.4	248.4	236.4	234.2	243.8	256.4	247.6	102.7
Rib roast—do	81.5	283.1	276.6	266.7	249.9	238.2	227.0	227.9	242.3	231.7	229.9	237.0	241.7	231.8	97.4
Chuck roast—do	72.3	322.2	315.5	309.6	283.4	263.3	249.6	250.6	263.1	251.5	253.5	260.1	258.9	248.5	97.1
Hamburger [5]—do	62.6	202.5	199.3	194.7	178.6	166.3	158.0	157.3	159.7	151.5	150.3	154.4	155.8	151.3	(4)
Veal:															
Cutlets—do	103.5	259.6	256.1	252.5	245.6	234.9	226.8	228.0	230.0	213.1	211.8	217.7	222.6	212.0	101.1
Pork:															
Chops—do	91.1	276.5	252.7	238.1	233.5	223.2	212.1	200.1	219.4	206.2	214.7	248.8	257.9	239.2	90.8
Bacon, sliced—do	78.6	206.3	204.5	201.9	199.1	191.3	185.7	194.7	227.7	228.8	227.6	230.4	224.7	208.4	80.9
Ham, whole—do	73.8	251.1	244.2	231.2	223.7	220.9	213.6	212.0	234.8	223.3	218.2	244.2	256.7	245.3	92.7
Salt pork—do	40.5	194.1	196.0	196.6	203.5	209.9	214.7	238.2	259.6	275.3	265.6	243.7	227.7	194.9	69.0
Lamb:															
Leg—do	76.9	270.8	279.4	275.6	257.6	236.3	220.3	226.9	235.2	225.0	230.7	229.8	247.9	235.8	95.7
Poultry: Roasting chickens—do	62.7	207.8	209.3	207.6	202.1	198.4	194.7	196.4	200.0	190.7	184.6	189.5	191.4	180.5	94.6
Fish:															
Fish (fresh, frozen) [5]—do	(6)	254.4	253.9	251.8	261.3	264.9	274.4	276.3	270.5	260.7	262.3	248.8	242.7	231.8	98.8
Salmon, pink [5]—16-ounce can	54.7	417.1	408.1	405.2	399.7	397.1	394.1	393.7	394.9	391.0	386.7	365.6	342.2	323.1	97.4
y products:															
Butter—pound	89.4	245.6	252.0	249.8	254.2	255.4	237.4	248.4	258.1	262.0	242.2	222.4	251.7	222.1	84.0
Cheese—do	69.8	268.6	262.1	254.6	248.1	241.5	243.7	247.9	242.2	236.1	230.9	226.2	221.0	215.6	92.3
Milk, fresh (delivered)—quart	22.1	182.0	177.1	174.0	171.5	174.3	174.6	174.3	173.3	171.2	171.0	167.5	163.0	158.8	97.1
Milk, fresh (grocery)—do	21.3	187.8	182.1	179.3	177.3	179.0	179.5	179.7	178.5	176.3	175.2	171.8	167.2	162.4	96.3
Milk, evaporated—14½-ounce can	15.6	218.3	212.8	210.9	202.1	197.2	197.1	195.8	189.6	186.4	182.3	177.2	175.3	175.2	93.9
s: Eggs, fresh—dozen	76.3	220.2	204.3	194.2	184.9	184.7	186.3	189.2	213.6	236.1	224.7	232.7	235.9	212.3	90.7
its and vegetables:															
Fresh fruits:															
Apples—pound	11.8	225.1	265.3	269.2	229.1	208.2	205.6	208.6	219.2	221.8	214.3	216.1	219.7	209.8	81.6
Bananas—do	16.4	270.7	269.3	261.7	257.8	256.3	255.3	257.4	257.9	257.8	256.9	254.6	252.3	245.9	97.3
Oranges, size 200—dozen	51.8	183.3	169.2	155.1	149.2	142.9	145.1	135.9	133.5	133.4	147.9	172.2	174.1	181.0	96.9
Fresh vegetables:															
Beans, green—pound	19.2	176.0	187.7	185.1	229.1	229.5	191.2	257.2	199.9	186.7	237.1	215.4	157.4	122.2	61.7
Cabbage—do	5.3	139.2	155.1	180.1	202.3	250.5	174.8	191.5	222.9	237.2	192.9	165.3	170.0	234.8	103.2
Carrots—bunch	9.9	183.6	202.1	263.2	310.1	254.3	227.8	261.3	246.3	311.3	261.3	241.8	205.7	179.4	84.9
Lettuce—head	11.8	143.1	177.8	164.1	200.7	159.9	138.0	153.5	201.0	179.9	170.8	151.6	189.1	172.4	97.6
Onions—pound	7.3	176.3	251.9	262.4	291.0	440.9	386.2	364.8	285.6	260.7	229.3	194.5	188.9	190.2	86.8
Potatoes—15 pounds	80.3	223.5	248.4	263.5	261.7	253.6	247.0	246.9	234.4	222.5	211.1	201.7	202.7	214.8	91.9
Spinach—pound	(3)	205.0	174.7	145.0	158.4	167.4	171.5	221.5	191.4	167.5	154.1	172.2	195.5	174.4	118.4
Sweetpotatoes—do	12.2	235.5	286.9	273.4	225.2	213.1	208.3	207.2	196.4	183.9	173.3	174.2	195.8	234.9	115.7
Canned fruits:															
Peaches—No. 2½ can	31.4	163.0	161.6	160.8	160.8	160.6	161.0	161.5	162.4	161.9	162.1	162.4	163.8	168.1	92.3
Pineapple—do	37.0	170.0	168.5	168.1	166.7	166.3	164.3	163.0	162.1	160.1	158.2	154.6	152.8	151.7	96.0
Canned vegetables:															
Corn—No. 2 can	19.7	158.8	158.6	158.2	157.9	156.6	156.9	157.0	156.6	155.5	152.5	149.8	146.9	147.1	88.6
Peas—do	15.1	115.8	113.5	112.8	112.3	113.5	115.5	118.0	118.0	117.9	117.9	118.0	116.9	118.3	89.8
Tomatoes—do	16.4	182.6	184.7	184.8	183.0	183.2	186.2	185.0	185.9	185.5	185.4	183.9	191.8	213.2	92.5
Dried fruits: Prunes—pound	20.8	204.7	204.9	204.3	206.9	208.6	211.2	216.0	217.8	219.4	219.0	228.7	236.8	245.3	94.7
Dried vegetables: Navy beans—do	23.0	312.9	309.7	310.5	311.6	314.3	314.9	312.9	311.9	306.0	297.5	292.3	294.2	286.6	83.0
erages: Coffee—do	51.5	204.9	204.8	204.7	204.2	204.0	204.0	203.6	201.5	198.1	194.3	190.5	186.6	181.3	93.3
s and oils:															
Lard—do	29.4	197.3	198.1	198.5	198.2	194.1	191.9	196.0	238.8	242.7	228.6	215.9	181.3	166.8	65.2
Hydrogenated veg. shortening [7]—do	43.4	209.6	220.3	218.2	211.4	207.1	214.4	217.6	225.8	220.0	197.7	191.5	190.9	203.6	93.9
Salad dressing—pint	40.8	168.3	168.4	167.1	164.4	159.8	159.0	158.8	156.1	152.4	150.2	149.7	150.3	151.8	(4)
Oleomargarine—pound	42.9	235.3	240.1	242.0	232.6	223.9	224.0	227.8	230.5	228.9	214.4	208.9	198.0	219.1	93.6
ar and sweets:															
Sugar—do	9.3	173.2	171.8	171.4	173.8	174.5	175.3	177.7	184.3	184.6	184.1	182.7	182.0	180.7	95.6

[1] July 1947=100.
[2] Index not computed.
[3] February 1943=100.
[4] Not priced in earlier period.
[5] 1938–39=100.
[6] Average price not computed.
[7] Formerly published as shortening in other containers.
[8] Inadequate reports.

TABLE D–7: Indexes of Wholesale Prices,[1] by Group of Commodities, for Selected Periods

[1926=100]

Year and month	All commodities [2]	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting materials	Metals and metal products [2]	Building materials	Chemicals and allied products	House-furnishing goods	Miscellaneous commodities	Raw materials	Semimanufactured articles	Manufactured products [2]	All commodities except farm products [2]
1913: Average	69.8	71.5	64.2	68.1	57.3	61.3	90.8	56.7	80.2	56.1	93.1	68.8	74.9	69.4	69.0
1914: July	67.3	71.4	62.9	69.7	55.3	55.7	79.1	52.9	77.9	56.7	88.1	67.3	67.8	66.9	65.7
1918: November	136.3	150.3	128.6	131.6	142.6	114.3	143.5	101.8	178.0	99.2	142.3	138.8	162.7	130.4	131.0
1920: May	167.2	169.8	147.3	193.2	188.3	159.8	155.5	164.4	173.7	143.3	176.5	163.4	253.0	157.8	165.4
1929: Average	95.3	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	97.5	93.9	94.5	93.3
1932: Average	64.8	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	55.1	59.3	70.3	68.3
1939: Average	77.1	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8	70.2	77.0	80.4	79.8
August	75.0	61.0	67.2	92.7	67.8	72.6	93.2	89.6	74.2	85.6	73.3	66.5	74.5	79.1	77.9
1940: Average	78.6	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3	71.9	79.1	81.6	80.8
1941: Average	87.3	82.4	82.7	108.3	84.8	76.2	99.4	103.2	84.4	94.3	82.0	83.5	86.9	89.1	88.3
December	93.6	94.7	90.5	114.8	91.8	78.4	103.3	107.8	90.4	101.1	87.6	92.3	90.1	94.6	93.3
1942: Average	98.8	105.9	99.6	117.7	96.9	78.5	103.8	110.2	95.5	102.4	89.7	100.6	92.6	98.6	97.0
1943: Average	103.1	122.6	106.6	117.5	97.4	80.8	103.8	111.4	94.9	102.7	92.2	112.1	92.9	100.1	98.7
1944: Average	104.0	123.3	104.9	116.7	98.4	83.0	103.8	115.5	95.2	104.3	93.6	113.2	94.1	100.8	99.6
1945: Average	105.8	128.2	106.2	118.1	100.1	84.0	104.7	117.8	95.2	104.5	94.7	116.8	95.9	101.8	100.8
August	105.7	126.9	106.4	118.0	99.6	84.8	104.7	117.8	95.3	104.5	94.8	116.3	95.5	101.8	100.9
1946: Average	121.1	148.9	130.7	137.2	116.3	90.1	115.5	132.6	101.4	111.6	100.3	134.7	110.8	116.1	114.9
June	112.9	140.1	112.9	122.4	109.2	87.8	112.2	129.9	96.4	110.4	98.5	126.3	105.7	107.3	106.7
November	139.7	169.8	165.4	172.5	131.6	94.5	130.2	145.5	118.9	118.2	106.5	153.4	129.1	134.7	132.9
1947: Average	152.1	181.2	168.7	182.4	141.7	108.7	145.0	179.7	127.3	131.1	115.5	165.6	148.5	146.0	145.5
August	153.7	181.6	172.3	182.8	141.8	112.6	148.5	179.6	117.5	129.9	113.1	167.0	148.8	147.9	147.3
September	157.4	186.4	179.2	185.6	142.4	114.2	150.1	183.4	122.3	131.3	115.9	170.9	150.5	151.8	150.8
October	158.5	189.7	177.7	193.1	143.4	116.1	150.5	185.8	128.6	132.4	117.1	175.2	152.6	151.2	151.5
November	159.6	187.9	177.9	202.5	145.2	118.2	150.8	187.7	135.8	137.5	118.8	175.5	154.9	152.4	153.1
December	163.2	196.7	178.4	203.4	148.0	124.6	151.5	191.0	135.0	139.4	121.5	182.0	156.5	154.9	155.6
1948: January	165.7	199.2	179.9	200.3	148.4	130.0	154.3	193.3	138.8	141.3	123.6	183.9	156.8	157.8	158.2
February	160.9	185.3	172.4	192.8	148.9	130.8	155.3	192.7	134.6	141.8	120.1	174.9	155.2	154.5	155.3
March	161.4	186.0	173.8	185.4	149.8	130.9	155.9	193.1	136.1	142.0	120.8	174.7	152.9	155.8	155.7
April	162.8	186.7	176.7	186.1	150.3	131.6	157.2	195.0	136.2	142.3	121.8	175.5	154.1	157.6	157.3
May	163.9	189.1	177.4	188.4	150.2	132.6	157.1	196.4	134.7	142.6	121.5	177.6	153.8	158.5	158.2
June	166.2	196.0	181.4	187.7	149.6	133.1	•158.5	196.8	135.8	•143.2	121.5	182.6	154.5	•159.6	•159.4
July	168.6	•195.2	188.3	189.2	•149.0	135.7	•162.2	•199.5	134.4	144.5	120.3	•184.2	155.9	•162.5	•162.5
Aug	169.4	191.1	189.5	188.4	148.5	136.6	170.8	202.8	132.0	145.4	119.6	182.0	159.7	164.5	164.5

[1] BLS wholesale price data, for the most part, represent prices in primary markets. They are prices charged by manufacturers or producers or are prices prevailing on organized exchanges. The weekly index is calculated from 1-day-a-week prices; the monthly index from an average of these prices. Monthly indexes for the last 2 months are preliminary.

The indexes currently are computed by the fixed base aggregate method, with weights representing quantities produced for sale in 1929–31. (For a detailed description of the method of calculation see "Revised Method of Calculation of the Bureau of Labor Statistics Wholesale Price Index," in the Journal of the American Statistical Association, December 1937.)

Because of past differences in the method of computation the weekly and monthly indexes should not be compared directly. The weekly index is useful only to indicate week-to-week changes and to provide later data price movements. It is not revised to take account of more complete repo

Mimeographed tables are available, upon request to the Bureau, gi monthly indexes for major groups of commodities since 1890 and for subgro and economic groups since 1913. Weekly indexes have been prepared since

[2] Includes current motor vehicle prices beginning with October 1946. rate of production of motor vehicles in October 1946 exceeded the mont average rate of civilian production in 1941, and in accordance with the nouncement made in September 1946, the Bureau introduced current pr for motor vehicles in the October calculations. During the war, mo vehicles were not produced for general civilian sale and the Bureau car April 1942 prices forward in each computation through September 1946.

• Corrected.

TABLE D–8: Indexes of Wholesale Prices,[1] by Group of Commodities, by Weeks

[Indexes 1926=100. Not directly comparable with monthly data. See footnote 1, table D–7]

Week ending	All commodities	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting materials	Metals and metal products	Building materials	Chemicals and allied products	House-furnishing goods	Miscellaneous commodities	Raw materials	Semimanufactured products	Manufactured products	All commodities except farm products
1948															
July 3	166.7	197.2	184.1	188.3	148.1	134.1	159.4	197.6	135.5	145.0	121.1	184.3	154.0	160.9	159.9
July 10	166.8	196.1	185.3	188.1	148.1	134.7	159.4	197.5	134.5	145.8	120.3	184.2	154.0	161.1	160.3
July 17	168.9	198.1	191.2	189.1	148.0	135.8	160.9	197.9	134.5	145.9	119.4	186.4	154.7	163.4	162.4
July 24	168.2	194.6	190.4	189.5	148.1	136.5	160.9	198.0	132.9	145.9	119.2	184.6	154.5	163.1	162.3
July 31	168.3	192.2	187.7	189.6	148.3	136.8	167.3	200.7	133.1	146.0	118.6	183.4	156.9	163.5	162.9
Aug. 7	169.2	193.6	190.0	188.5	148.1	136.9	169.2	201.6	132.0	146.4	118.2	184.3	158.8	164.3	163.8
Aug. 14	169.0	190.4	190.3	188.3	147.8	137.3	170.9	202.0	131.6	146.8	118.3	182.5	159.7	164.7	164.2
Aug. 21	169.2	191.0	189.5	189.6	148.0	137.3	171.5	202.0	131.7	146.8	118.7	182.8	159.3	164.9	164.3
Aug. 28	168.4	189.3	187.8	189.9	147.7	137.4	171.7	202.3	132.2	146.8	118.4	181.7	159.0	164.2	163.8
Sept. 4	167.4	187.8	184.0	189.2	147.5	137.6	172.0	203.2	132.1	146.9	118.5	180.7	158.7	163.0	162.8
Sept. 11	168.0	188.1	185.9	188.8	147.5	137.6	172.0	203.1	133.2	147.7	119.9	180.9	158.6	163.9	163.4
Sept. 18	169.2	190.1	189.9	188.2	147.2	137.7	171.5	203.2	132.5	147.8	120.3	182.0	158.6	165.5	164.6
Sept. 25	168.7	190.8	187.8	187.9	146.7	137.8	171.8	202.9	133.5	147.8	119.3	182.4	158.3	164.4	163.8

[1] See footnote 1, table D–7.

TABLE D–9: Indexes of Wholesale Prices,[1] by Group and Subgroup of Commodities

[1926=100]

Group and subgroup	1948								1947					1946	1939
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	June	Aug.
All commodities [2]	169.4	168.6	166.2	163.9	162.8	161.4	160.9	165.7	163.2	159.6	158.5	157.4	153.7	112.9	75.0
Farm products	191.1	•195.2	196.0	189.1	186.7	186.0	185.3	199.2	196.7	187.9	189.7	186.4	181.6	140.1	61.0
Grains	179.2	190.6	209.2	213.5	217.9	218.0	220.0	256.3	252.7	245.5	241.4	230.3	208.8	151.8	51.5
Livestock and poultry	250.0	250.8	239.2	219.0	204.4	209.4	210.0	232.9	226.3	211.0	224.5	224.8	215.9	137.4	66.0
Other farm products	157.8	161.9	165.4	163.3	166.4	162.2	159.9	162.4	162.5	157.2	153.7	150.3	152.6	137.5	60.1
Foods	189.5	188.3	181.4	177.4	176.7	173.8	172.4	179.9	178.4	177.9	177.7	179.2	172.3	112.9	67.2
Dairy products	185.1	182.9	181.3	176.6	181.0	179.8	184.8	183.9	183.5	175.9	167.3	170.6	164.3	127.3	67.9
Cereal products	154.0	154.5	155.1	156.3	158.0	158.6	160.2	170.1	170.6	172.1	166.7	158.2	153.3	101.7	71.9
Fruits and vegetables	140.7	151.2	147.7	147.0	148.6	145.7	144.5	140.7	135.4	135.5	130.8	130.1	133.0	136.1	58.5
Meats	273.7	263.8	241.3	233.2	226.0	217.1	206.2	222.3	214.8	217.6	230.0	244.8	234.6	110.1	73.7
Other foods	146.7	148.5	148.1	144.2	144.4	144.3	146.7	155.0	160.0	159.4	157.2	150.7	140.7	98.1	60.3
Hides and leather products	188.4	189.2	187.7	188.4	186.1	185.4	192.8	200.3	203.4	202.5	193.1	185.6	182.8	122.4	92.7
Shoes	189.4	186.3	185.8	185.6	191.7	193.8	194.7	194.3	190.7	187.0	180.6	176.8	176.5	129.5	100.8
Hides and skins	212.1	220.3	215.2	218.0	199.3	186.2	207.2	238.9	256.9	263.2	243.7	221.1	214.5	121.5	77.2
Leather	186.0	189.2	186.9	188.2	183.6	185.9	199.6	209.4	217.2	216.9	205.0	197.4	191.1	110.7	84.0
Other leather products	148.6	149.9	150.9	150.9	143.3	143.8	143.8	143.8	141.8	141.3	139.6	139.5	139.1	115.2	97.1
Textile products	148.5	•149.0	149.6	150.2	150.3	149.8	148.9	148.4	148.0	145.2	143.4	142.4	141.8	109.2	67.8
Clothing	146.7	146.7	145.2	145.8	145.8	144.6	144.7	143.4	137.8	137.1	136.2	135.9	135.8	120.3	81.5
Cotton goods	205.3	•209.3	213.1	217.8	219.2	218.3	214.9	214.8	213.7	209.3	204.7	202.5	201.8	139.4	65.5
Hosiery and underwear	104.9	•104.9	105.3	105.4	105.4	105.4	105.0	104.4	103.0	101.4	100.0	99.9	99.9	75.8	61.5
Rayon	41.6	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.0	37.0	37.0	37.0	37.0	30.2	28.5
Silk	46.4	46.4	46.4	46.4	46.4	46.4	46.4	46.4	73.3	73.3	71.2	68.3	68.2	(3)	44.3
Woolen and worsted goods	149.4	147.5	147.5	147.5	147.5	145.7	143.0	141.9	139.6	134.9	134.3	133.8	133.3	112.7	75.5
Other textile products	186.6	184.5	183.1	174.2	170.0	174.7	180.2	181.2	178.3	174.9	175.6	175.0	171.2	112.3	63.7
Fuel and lighting materials	136.6	135.7	133.1	132.6	131.6	130.9	130.8	130.0	124.6	118.2	116.1	114.2	112.6	87.8	72.6
Anthracite	136.2	131.6	127.1	125.5	124.6	124.6	124.5	124.2	123.4	123.4	123.1	122.5	121.7	106.1	72.1
Bituminous coal	194.5	192.8	182.6	181.8	178.9	177.9	177.9	176.8	174.3	173.7	172.6	170.3	169.9	132.8	96.0
Coke	217.4	212.3	206.6	205.4	197.5	190.6	190.6	190.6	183.4	182.2	182.0	181.9	170.2	133.5	104.2
Electricity	(3)	(3)	65.7	65.4	66.1	65.7	66.6	66.4	66.5	66.3	64.9	65.2	64.5	67.2	75.8
Gas	(3)	90.4	90.7	89.3	89.1	88.7	85.8	84.5	85.4	83.6	86.8	87.0	86.0	79.6	86.7
Petroleum and products	122.1	122.1	122.1	122.1	121.8	121.8	121.7	120.7	112.0	99.9	96.5	93.7	92.2	64.0	51.7
Metals and metal products [2]	170.8	•162.2	•158.5	157.1	157.2	155.9	155.3	154.3	151.5	150.8	150.5	150.1	148.5	112.2	93.2
Agricultural machinery and equipment [r]	135.5	•134.1	132.2	130.5	129.8	129.3	128.9	128.6	127.0	125.5	122.8	121.6	120.4	104.5	93.5
Farm machinery [r]	137.5	•136.3	134.1	132.1	131.3	130.8	130.4	130.0	128.6	127.0	124.1	122.8	121.6	104.9	94.7
Iron and steel	162.8	153.1	149.4	148.9	149.4	147.7	146.3	144.6	140.2	139.5	139.3	139.0	138.3	110.1	95.1
Motor vehicles [r]	174.2	•168.2	•163.9	161.7	161.6	161.6	161.6	161.6	160.8	160.3	159.9	159.4	156.4	135.5	92.5
Nonferrous metals	165.9	153.7	152.1	150.0	149.8	146.8	146.8	145.5	143.0	142.2	142.0	142.0	141.8	99.2	74.6
Plumbing and heating	153.2	145.3	145.3	143.2	138.7	138.7	138.7	138.8	136.1	136.1	136.1	136.0	129.4	106.0	79.3
Building materials	202.8	•199.5	196.8	196.4	195.0	193.1	192.7	193.3	191.0	187.7	185.8	183.4	179.6	129.9	89.6
Brick and tile	158.6	157.9	153.3	152.8	152.5	151.6	151.1	150.9	148.8	148.1	146.4	145.4	144.3	121.3	90.5
Cement	133.3	•132.2	128.8	128.2	127.5	127.4	127.2	126.5	121.6	120.6	120.1	119.1	116.9	102.6	91.3
Lumber	318.2	•316.8	313.2	312.9	309.2	303.8	303.8	307.3	303.2	296.0	290.2	286.5	276.9	176.0	90.1
Paint and paint materials	158.0	157.8	158.7	158.4	158.6	156.7	159.6	163.2	164.0	161.8	160.7	157.1	154.2	108.6	82.1
Plumbing and heating	153.2	145.3	145.3	143.2	138.7	138.7	138.7	138.8	136.1	136.1	136.1	136.0	129.4	106.0	79.3
Structural steel	178.8	159.6	153.3	153.3	155.8	155.8	149.4	143.0	143.0	143.0	143.0	143.0	143.0	120.1	107.3
Other building materials	172.0	166.9	163.5	163.1	162.2	161.8	159.8	157.9	155.5	152.6	152.5	150.7	150.1	118.4	89.5
Chemicals and allied products	132.0	134.4	135.8	134.7	136.2	136.1	134.6	138.8	135.0	135.8	128.6	122.3	117.5	96.4	74.2
Chemicals	126.3	127.8	126.2	125.9	126.8	126.8	126.5	125.8	124.1	124.3	122.1	118.2	117.5	98.0	83.8
Drug and pharmaceutical materials	153.3	153.6	153.7	153.3	153.8	154.4	154.3	154.4	154.9	151.1	137.5	136.6	136.6	109.4	77.1
Fertilizer materials	114.9	115.0	113.9	115.0	115.2	114.9	115.1	115.7	114.4	112.4	111.5	109.8	105.7	82.7	65.5
Mixed fertilizers	105.9	104.4	103.2	103.2	103.1	103.1	102.8	102.4	101.5	100.8	97.7	97.2	97.3	86.6	73.1
Oils and fats	180.3	193.2	212.7	205.0	212.3	211.4	201.5	236.7	215.9	226.7	193.4	163.3	133.1	102.1	40.6
Housefurnishing goods	145.4	144.5	•143.2	142.6	142.3	142.0	141.8	141.3	139.4	137.5	132.4	131.3	129.9	110.4	85.6
Furnishings	149.3	•148.5	•146.7	145.8	145.2	144.7	144.4	143.8	142.8	140.5	139.4	138.5	138.0	114.5	90.0
Furniture [r]	141.6	•140.4	•139.9	139.6	139.6	139.4	139.4	139.1	136.2	134.7	134.1	131.3	129.1	108.5	81.1
Miscellaneous	119.6	120.3	121.5	121.5	121.8	120.8	120.1	123.6	121.5	118.8	117.1	115.9	113.1	98.5	73.3
Automobile tires and tubes [r]	66.2	66.2	63.5	63.5	63.4	63.4	63.4	63.4	63.4	61.0	60.8	60.8	60.8	65.7	59.5
Cattle feed	198.4	239.6	292.4	291.1	296.9	284.2	262.0	336.0	308.2	282.7	280.5	287.2	261.3	197.8	68.4
Paper and pulp	169.0	166.8	167.3	167.4	167.5	•167.3	167.4	168.1	164.7	160.7	159.8	159.5	158.1	115.6	80.0
Rubber, crude	48.1	49.6	47.1	47.6	46.7	42.3	42.7	44.7	44.5	49.3	43.0	36.4	33.7	46.2	34.9
Other miscellaneous	132.2	130.0	129.8	129.7	130.2	130.2	130.8	130.7	130.0	128.5	126.6	124.6	122.0	101.0	81.3

[1] See footnote 1, table D–7.
[2] See footnote 2, table D–7.
[3] Not available.
[r] Revised.
• Corrected.

E: Work Stoppages

TABLE E–1: Work Stoppages Resulting From Labor-Management Disputes [1]

Month and year	Number of stoppages		Workers involved in stoppages		Man-days idle during month or year	
	Beginning in month or year	In effect during month	Beginning in month or year	In effect during month	Number	Percent of estimated working time
1935–39 (average)	2,862	----------	1,130,000	----------	16,900,000	0.2
1945	4,750	----------	3,470,000	----------	38,000,000	.3
1946	4,985	----------	4,600,000	----------	116,000,000	1.4
1947	3,693	----------	2,170,000	----------	34,600,000	.4
1947: August	336	583	113,000	259,000	2,520,000	.2
September	219	435	79,200	187,000	1,970,000	.2
October	219	393	64,300	171,000	1,780,000	.2
November	178	328	57,200	139,000	829,000	.1
December	119	236	32,300	56,900	590,000	.0
1948: January [2]	175	250	75,000	100,000	1,000,000	.1
February [2]	200	300	70,000	110,000	725,000	.1
March [2]	225	350	500,000	550,000	6,000,000	.6
April [2]	275	400	175,000	625,000	8,000,000	1.1
May [2]	275	425	165,000	350,000	4,100,000	.6
June [2]	310	475	165,000	240,000	2,000,000	.3
July [2]	335	525	225,000	300,000	2,200,000	.3
August [2]	335	525	150,000	225,000	1,750,000	.2

[1] All known work stoppages, arising out of labor-management disputes, involving six or more workers and continuing as long as a full day or shift are included in reports of the Bureau of Labor Statistics. Figures on "workers involved" and "man-days idle" cover all workers made idle in establishments directly involved in a stoppage. They do not measure the indirect or secondary effects on other establishments or industries whose employees are made idle as a result of material or service shortages.

[2] Preliminary estimates.

F: Building and Construction

TABLE F–1: Expenditures for New Construction [1]

[Value of work put in place]

Type of construction	Expenditures (in millions)														
	1948									1947				1947	1946
	Sept.[2]	Aug.[2]	July [2]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Total	Total
Total new construction [3]	$1,804	$1,790	$1,715	$1,616	$1,461	$1,311	$1,166	$1,009	$1,157	$1,320	$1,432	$1,497	$1,423	$13,977	$10,458
Private construction	1,344	1,351	1,318	1,235	1,120	1,024	940	837	948	1,097	1,141	1,129	1,086	10,893	8,253
Residential building (nonfarm)	685	690	680	635	585	525	475	400	500	610	630	590	540	5,260	3,183
Nonresidential building (nonfarm) [4]	342	334	324	305	277	264	266	265	273	284	287	275	267	3,131	3,346
Industrial	117	113	110	110	111	116	120	125	130	134	136	137	138	1,702	1,689
Commercial	125	127	125	116	97	87	88	84	85	91	93	82	75	835	1,110
Warehouses, office and loft buildings	36	34	29	28	25	23	22	22	24	22	19	14	14	216	309
Stores, restaurants, and garages	89	93	96	88	72	64	66	62	61	69	74	68	61	619	801
Other nonresidential building	100	94	89	79	69	61	58	56	58	59	58	56	54	594	547
Religious	26	23	21	18	16	14	13	12	13	13	13	13	12	118	72
Educational	25	24	22	19	17	16	15	15	16	17	17	17	16	164	115
Hospital and institutional	10	10	10	10	10	9	9	9	9	9	9	8	9	107	81
Remaining types [5]	39	37	36	32	26	22	21	20	20	20	19	18	17	205	279
Farm construction	63	82	81	62	50	37	23	14	14	15	25	50	65	450	330
Public utilities	254	245	233	233	208	198	176	158	161	188	199	214	214	2,052	1,374
Railroad	36	36	33	30	26	25	23	21	24	28	30	32	33	318	259
Telephone and telegraph	65	57	55	63	60	63	54	48	45	55	53	59	54	510	305
Other public utilities	153	152	145	140	122	110	99	89	92	105	116	123	127	1,224	811
Public construction	460	439	397	381	341	287	226	172	209	223	291	368	337	3,084	2,205
Residential building	5	5	5	5	5	6	5	6	9	8	8	9	7	182	369
Nonresidential building (other than military or naval facilities)	104	96	88	79	77	71	65	49	53	52	50	53	49	505	325
Industrial [7]	2	2	2	2	2	2	1	1	1	0	0	1	1	25	84
Educational	57	52	48	43	40	37	36	30	32	32	29	27	26	275	101
Hospital and institutional	24	22	18	15	15	13	10	7	7	8	8	9	8	81	53
All other nonresidential	21	20	20	19	20	19	18	11	13	12	13	16	14	124	59
Military and naval facilities	13	13	12	11	13	13	12	11	14	17	19	23	22	204	199
Highways	205	200	169	167	136	98	57	41	56	65	119	178	159	1,233	772
Sewer and water	43	41	41	40	39	38	33	25	27	28	32	35	32	331	194
Miscellaneous public-service enterprises [8]	10	9	10	10	11	9	9	6	8	8	10	11	12	117	87
Conservation and development	64	61	58	56	47	41	36	28	33	36	41	45	44	396	240
All other public [9]	16	14	14	13	13	11	9	6	9	9	12	14	12	116	30

[1] Joint estimates of the Bureau of Labor Statistics, U. S. Department of Labor, and the Office of Domestic Commerce, U. S. Department of Commerce. Estimated construction expenditures represent the monetary value of the volume of work accomplished during the given period of time. These figures should be differentiated from permit valuation data reported in the tabulations for urban building authorized and the data on value of contract awards reported in table F-2.

[2] Preliminary.

[3] Revised.

[4] Includes major additions and alterations.

[5] Excludes nonresidential building by privately owned public utilities.

[6] Includes social and recreational buildings, hotels, and miscellaneous buildings not elsewhere classified.

[7] Excludes expenditures to construct facilities used in atomic energy projects.

[8] Covers primarily publicly owned electric light and power systems and local transit facilities.

[9] Covers miscellaneous construction items such as airports, monuments, memorials, etc.

TABLE F-2: Value of Contracts Awarded and Force-Account Work Started on Federally Financed New Construction, by Type of Construction [1]

Period	Value (in thousands)															
	Total new construction [2]	Airports [3]	Building								Conservation and development			Highways	All other [6]
			Total	Residential	Nonresidential						Total	Reclamation	River, harbor, and flood control		
					Total	Educational [4]	Hospital and institutional			Administration and general [5]	Other nonresidential					
							Total	Veterans'	Other							
	$1,533,439	(7)	$561,394	$63,465	$497,929	(8)	(8)	(8)	(8)	(8)	(8)	$189,710	$73,797	$115,913	$511,685	$270,650
	1,586,604	$4,753	669,222	231,071	438,151	(8)	(8)	(8)	(8)	(8)	(8)	225,423	115,612	109,811	355,701	331,505
	7,775,497	579,176	6,130,389	549,472	5,580,917	(8)	(8)	(8)	(8)	(8)	(8)	217,795	150,708	67,087	347,988	500,149
	1,450,252	14,859	549,656	435,453	114,203	(8)	(8)	(8)	(8)	(8)	(8)	300,405	169,253	131,152	535,784	49,548
	1,294,069	24,645	276,514	51,186	225,328	$47,692	$101,831	$96,123	$5,708	$31,159	$44,646	308,029	77,095	230,934	657,087	27,794
August	121,083	1,346	34,055	4,347	29,708	1,304	24,466	24,281	185	2,518	1,420	19,412	16,186	3,226	65,742	528
September	89,262	1,109	5,153	409	4,744	1,155	249	217	32	2,565	775	22,197	1,699	20,498	59,827	976
October	111,191	4,503	7,928	586	7,342	1,198	705	668	37	1,578	3,861	20,650	3,967	16,683	73,720	4,390
November	114,096	772	16,351	711	15,640	912	9,991	9,961	30	3,506	1,231	46,049	628	45,421	49,220	1,704
December	112,388	806	32,973	104	32,869	913	26,433	26,378	55	3,332	2,191	19,541	6,928	12,613	54,349	4,719
January	105,737	808	14,136	149	13,987	253	8,818	8,603	215	1,961	2,955	41,585	4,667	36,918	47,268	1,940
February	155,428	645	46,632	859	45,773	168	41,762	41,557	205	1,735	2,108	57,361	1,229	56,132	49,426	1,364
March	145,350	5,322	63,193	61	63,132	256	59,131	58,920	211	1,230	2,515	21,793	6,639	15,154	51,561	3,481
April	154,375	2,521	9,867	553	9,314	12	5,606	5,049	557	1,863	1,833	79,782	56,934	22,848	58,247	3,958
May	114,040	1,199	24,712	364	24,348	468	20,215	20,045	170	1,861	1,804	10,309	4,738	5,571	75,648	2,172
June	134,800	2,003	35,989	825	35,164	89	15,156	13,739	1,417	9,696	10,223	23,628	8,877	14,751	68,486	4,694
July [9]	137,730	1,578	9,944	254	9,690	0	6,691	1,493	5,198	1,185	1,814	41,546	1,327	40,219	78,428	6,234
August [10]	113,832	(8)	6,255	83	6,172	2	4,346	816	3,530	878	946	15,937	236	15,701	90,342	1,298

[1] Excludes projects classified as "secret" by the military, and all construction for the Atomic Energy Commission. Data for Federal-aid programs cover amounts contributed by both the owner and the Federal Government.
[2] Includes major additions and alterations.
[3] Excludes hangars and other buildings, which are included under "Other nonresidental" building construction.
[4] Includes educational facilities under the Federal temporary reuse educational facilities program.
[5] Includes post offices, armories, offices, and customs houses.
[6] Includes electrification projects, water supply and sewage-disposal systems, forestry projects, railroad construction, and other types of projects not elsewhere classified.
[7] Included in "All other."
[8] Unavailable.
[9] Revised.
[10] Preliminary.

TABLE F–3: Urban Building Authorized, by Principal Class of Construction and by Type of Buildi

Period	Total all classes [1]	Valuation (in thousands)								Number of new dwelling units—Ho keeping only				
		New residential building						New nonresidential building	Additions, alterations, and repairs	Privately financed				
		Housekeeping					Non-housekeeping [3]			Total	1-family	2-family [2]	Multi-family [4]	
		Privately financed dwelling units				Publicly financed dwelling units								
		Total	1-family	2-family [2]	Multi-family [4]									
1942	$2,707,573	$598,570	$478,658	$42,629	$77,283	$296,933	$22,910	$1,510,688	$278,472	184,892	138,908	15,747	30,237	9
1946	4,743,414	2,114,833	1,830,260	103,042	181,531	355,587	43,369	1,458,602	771,023	430,195	358,151	24,326	47,718	9
1947	5,549,718	2,880,926	2,361,509	156,408	363,009	35,177	29,831	1,712,672	891,112	501,353	393,550	34,159	73,644	8
1947: July	537,317	271,142	221,264	14,268	35,610	315	1,809	170,181	93,870	47,167	36,973	3,053	7,141	
August	567,979	297,022	238,222	16,432	42,368	1,604	2,966	182,041	84,346	51,121	39,233	3,521	8,367	
September	561,536	303,186	251,286	14,780	37,120	2,229	4,080	162,234	89,807	51,877	40,834	2,992	8,051	
October	604,165	340,627	275,691	18,032	46,904	3,795	3,450	168,334	87,957	55,870	42,825	3,536	9,509	
November	501,556	256,728	201,262	15,724	39,742	6,519	5,620	166,472	66,217	41,010	30,284	3,316	7,410	
December	479,881	227,675	179,806	11,951	35,918	2,992	2,284	177,315	69,615	36,088	26,596	2,443	7,049	
1948: January	426,531	198,698	150,879	11,501	36,318	6,616	3,224	152,086	65,907	32,523	23,704	2,280	6,539	
February	414,339	202,050	146,934	8,954	46,162	9,237	1,441	141,188	60,423	32,166	22,180	1,863	8,123	1
March	631,621	321,562	252,778	20,016	48,768	597	4,082	222,565	82,815	50,788	37,520	4,092	9,176	
April	714,954	411,300	317,892	34,372	59,036	1,960	6,166	196,095	99,433	64,387	45,700	6,997	11,690	
May	657,480	349,949	291,208	17,895	40,846	5,393	2,729	205,619	93,790	52,811	41,423	3,769	7,619	
June [6]	699,657	365,656	301,598	16,432	47,626	3,350	4,711	219,962	105,978	54,112	42,106	3,327	8,679	
July [7]	647,385	317,716	263,221	14,462	40,033	10,969	3,167	219,391	96,142	46,133	36,524	2,731	6,878	1

[1] Building for which building permits were issued and Federal contracts awarded in all urban places, including an estimate of building undertaken in some smaller urban places that do not issue permits.

The data cover federally and non-federally financed building construction combined. Estimates of non-Federal (private, and State and local government) urban building construction are based primarily on building-permit reports received from places containing about 85 percent of the urban population of the country; estimates of federally financed projects are compiled from notifications of construction contracts awarded, which are obtained from other Federal agencies. Data from building permits are not adjusted to allow for lapsed permits or for lag between permit issuance and the start of construction. Thus, the estimates do not represent construction actually started during the month.

Urban, as defined by the Bureau of the Census, covers all incorpor places of 2,500 population or more in 1940, and, by special rule, a small num of unincorporated civil divisions.

[2] Covers additions, alterations, and repairs, as well as new residential nonresidential building.

[3] Includes units in 1-family and 2-family structures with stores.

[4] Includes units in multifamily structures with stores.

[5] Covers hotels, dormitories, tourist cabins, and other nonhousekeep residential buildings.

[6] Revised.

[7] Preliminary.

BLE F-4: New Nonresidential Building Authorized in All Urban Places,[1] by General Type and by Geographic Division [2]

graphic division and pe of new nonresidential building	Valuation (in thousands)														
	1948							1947						1947	1946
	July [3]	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	Total	Total
types	$219,391	$219,962	$205,619	$196,095	$222,565	$141,188	$152,086	$177,315	$166,472	$168,334	$162,234	$182,041	$170,181	$1,712,674	$1,458,602
New England	15,339	20,512	10,142	10,279	8,956	5,236	26,689	6,307	14,753	12,395	10,949	6,541	10,540	109,831	103,716
Middle Atlantic	30,545	32,431	50,897	27,338	55,770	20,497	9,305	42,529	23,513	21,465	18,845	40,322	28,357	271,742	195,151
East North Central	57,717	55,231	37,567	45,082	33,614	26,458	21,268	29,084	36,414	44,187	36,338	49,539	39,079	372,866	338,659
West North Central	12,114	13,671	12,079	14,985	16,434	16,566	8,813	19,008	12,263	13,476	12,217	10,752	10,799	132,163	112,927
South Atlantic	34,905	24,933	19,745	22,840	25,267	14,562	18,547	21,403	15,958	19,182	17,791	16,321	19,831	200,042	171,247
East South Central	6,392	8,682	7,798	6,176	9,902	3,928	7,152	7,327	5,076	6,159	6,175	6,936	8,342	73,138	65,583
West South Central	25,965	20,319	24,584	21,805	21,558	27,433	27,121	17,923	26,079	15,366	19,454	11,915	19,141	193,072	132,641
Mountain	7,778	4,429	7,818	6,240	8,724	3,826	2,761	4,067	3,828	5,449	6,039	9,646	3,906	58,162	40,287
Pacific	28,636	39,754	34,989	41,350	42,340	22,682	30,460	29,669	28,590	30,657	34,424	30,071	30,184	301,658	298,391
Industrial buildings [4]	24,387	32,832	26,233	26,899	32,910	16,883	17,453	33,524	22,702	25,194	27,806	40,407	25,762	321,847	397,237
New England	3,526	2,365	2,360	971	1,806	1,051	803	1,642	2,601	1,920	2,504	892	1,616	25,952	19,477
Middle Atlantic	5,155	4,938	8,375	7,518	6,823	3,699	2,250	7,053	3,067	4,963	4,668	7,615	6,743	57,755	77,845
East North Central	9,217	15,602	7,997	9,262	9,513	3,859	5,477	10,137	9,012	9,342	9,538	21,767	9,764	118,666	133,599
West North Central	713	2,039	908	3,081	1,728	1,205	971	1,781	1,384	1,671	2,010	3,078	2,137	19,890	29,161
South Atlantic	1,180	2,159	1,496	1,519	4,469	1,640	1,927	3,851	1,410	1,714	1,304	1,315	1,818	20,549	34,612
East South Central	452	1,465	691	225	1,088	330	466	1,489	981	717	1,557	1,207	839	13,573	14,688
West South Central	1,836	1,023	1,316	760	2,409	1,637	1,641	2,666	1,456	1,282	1,516	1,657	686	17,519	13,145
Mountain	65	248	147	79	383	119	380	181	359	257	504	200	164	2,852	4,417
Pacific	2,243	2,993	2,943	3,484	4,691	3,343	3,568	4,724	2,432	3,328	4,205	2,676	1,995	45,091	70,293
Commercial buildings [5]	91,822	82,407	84,424	83,852	82,366	47,315	72,617	65,591	66,927	78,647	82,681	69,641	72,884	686,920	669,574
New England	5,780	7,307	3,275	3,401	2,547	1,257	12,431	1,804	3,367	4,203	4,233	3,294	3,440	32,853	43,164
Middle Atlantic	13,072	13,508	10,550	11,506	12,753	5,411	5,412	13,222	8,114	10,739	7,641	9,780	9,316	90,725	74,569
East North Central	17,174	17,903	14,660	15,198	10,010	7,891	10,188	11,518	13,767	15,739	14,846	17,196	14,647	119,958	119,011
West North Central	6,575	4,647	6,022	5,692	8,286	2,586	5,171	6,885	5,215	5,960	6,342	4,585	5,624	57,240	51,822
South Atlantic	13,501	10,361	11,923	13,498	9,118	8,170	7,445	7,949	7,721	10,423	11,353	10,031	12,358	106,788	87,405
East South Central	3,202	3,232	3,375	3,891	3,245	2,027	4,172	1,978	2,582	3,619	2,997	3,821	4,762	34,680	34,647
West South Central	12,324	8,120	13,455	10,441	10,917	8,062	12,036	8,705	8,292	9,968	11,651	6,477	7,502	91,548	82,156
Mountain	4,192	2,761	3,275	3,747	4,998	2,093	1,484	1,651	2,753	2,950	3,370	2,431	1,727	26,855	26,057
Pacific	16,002	14,568	17,889	16,478	20,492	9,818	14,278	11,879	15,116	15,046	20,248	12,026	13,508	126,273	150,743
Community buildings [6]	67,700	66,074	66,775	51,410	78,226	58,666	34,404	49,975	48,969	37,262	23,340	49,750	38,567	406,890	190,163
New England	3,443	8,780	3,457	4,255	3,477	1,465	5,944	938	5,110	4,214	788	1,437	1,740	25,759	19,739
Middle Atlantic	8,572	8,753	26,082	4,373	32,780	10,049	666	20,629	10,419	2,418	4,538	20,718	3,415	80,190	21,247
East North Central	21,304	14,105	10,354	13,954	8,707	10,989	2,623	4,336	5,355	9,798	3,553	3,802	8,707	62,541	42,412
West North Central	2,736	3,994	2,528	2,665	3,796	11,998	787	7,752	3,760	4,174	1,410	1,549	1,739	34,639	19,160
South Atlantic	10,567	6,508	2,887	4,761	9,623	3,341	7,570	3,617	5,151	5,149	2,991	3,659	3,239	40,161	22,570
East South Central	2,294	2,591	2,931	1,243	1,134	675	1,757	3,239	709	1,427	1,111	974	1,436	16,895	12,954
West South Central	9,544	8,835	7,999	7,359	6,463	16,591	11,007	4,313	13,456	2,907	4,193	2,218	9,827	65,309	25,963
Mountain	2,825	566	3,907	1,299	2,778	608	409	1,270	392	1,659	1,117	5,212	1,080	18,366	5,367
Pacific	6,415	11,942	6,630	11,501	9,468	2,950	3,641	3,881	4,617	5,516	3,639	10,181	7,384	63,030	20,751
Public buildings [7]	5,629	14,736	4,296	5,508	7,055	5,323	5,577	4,556	4,920	1,767	3,744	3,398	2,769	40,699	12,042
New England	55	613	90	121	455	1,250	2,289	502	834	355	0	77	182	3,418	371
Middle Atlantic	337	2,463	1,147	659	488	112	214	219	200	3	10	324	244	4,712	1,493
East North Central	3,700	1,276	101	475	849	568	684	900	802	386	1,444	1,332	476	8,171	880
West North Central	36	754	26	1,500	124	77	535	200	26	86	168	177	222	1,696	190
South Atlantic	913	1,449	91	648	394	349	30	92	244	237	7	306	871	6,285	988
East South Central	0	1,029	413	209	3,374	417	206	150	166	55	135	17	3	830	116
West South Central	286	1,467	333	203	496	566	1,023	551	1,842	165	615	314	35	4,430	665
Mountain	68	475	36	341	61	259	113	180	0	99	362	282	181	2,416	70
Pacific	234	5,210	2,059	1,352	814	1,725	483	1,762	806	381	1,003	569	555	8,741	7,269
Public works and utility buildings [8]	17,846	9,306	10,167	15,639	12,715	7,483	16,284	16,942	13,105	12,128	12,889	7,452	18,263	143,827	102,241
New England	1,736	530	119	581	309	75	5,113	1,092	2,243	741	2,723	147	2,922	15,086	15,638
Middle Atlantic	1,923	1,252	3,045	1,839	1,784	671	365	576	518	1,205	608	681	7,202	24,968	10,052
East North Central	3,279	2,549	1,094	2,692	2,889	2,481	1,649	1,211	5,544	5,413	3,541	2,767	2,203	35,972	23,383
West North Central	882	1,082	1,055	701	1,762	459	1,035	1,803	508	552	1,036	282	98	8,738	6,108
South Atlantic	7,845	3,051	2,572	1,556	592	670	1,125	5,347	872	813	1,434	346	759	19,046	20,037
East South Central	193	11	86	315	702	325	410	307	413	51	125	550	1,024	4,154	862
West South Central	1,494	322	669	2,099	688	208	814	1,241	411	339	740	720	616	7,648	5,048
Mountain	209	8	2	238	155	575	50	499	13	0	158	1,147	455	3,520	1,486
Pacific	285	501	1,525	5,618	3,834	2,019	5,723	4,866	2,583	3,014	2,524	812	2,984	24,695	19,627
All other buildings [9]	12,007	14,607	13,724	12,787	9,293	5,518	5,751	6,729	9,851	13,338	11,772	11,395	11,933	112,491	77,345
New England	800	917	841	950	362	138	109	329	598	962	701	694	640	6,764	5,328
Middle Atlantic	1,486	1,517	1,698	1,443	1,142	555	398	830	1,195	2,137	1,380	1,204	1,437	13,392	9,944
East North Central	3,044	3,797	3,361	3,501	1,646	670	647	982	1,934	3,509	3,416	2,675	3,282	27,556	19,374
West North Central	1,172	1,155	1,540	1,346	738	241	314	587	1,370	1,033	1,251	1,081	979	9,961	6,485
South Atlantic	899	1,405	776	858	1,071	392	450	547	560	846	702	664	785	7,213	5,636
East South Central	251	353	302	293	359	154	141	164	225	290	250	367	278	3,005	2,316
West South Central	480	552	812	943	585	369	600	447	622	705	739	529	475	6,618	5,664
Mountain	420	371	451	536	349	172	325	286	311	484	528	374	299	4,153	2,889
Pacific	3,455	4,540	3,943	2,917	3,041	2,827	2,767	2,557	3,036	3,372	2,805	3,807	3,758	33,829	29,710

[1] Building for which permits were issued and Federal contracts awarded in urban places, including an estimate of building undertaken in some smaller urban places that do not issue permits. Sums of components do not always equal totals exactly because of rounding.

[2] For scope and source of urban estimates, see table F-3, footnote 1.

[3] Preliminary.

[4] Includes factories, navy yards, army ordnance plants, bakeries, ice plants, industrial warehouses, and other buildings at the site of these and similar production plants.

[5] Includes amusement and recreation buildings, stores and other mercantile buildings, commercial garages, gasoline and service stations, etc.

[6] Includes churches, hospitals, and other institutional buildings, schools, libraries, etc.

[7] Includes Federal, State, county, and municipal buildings, such as post offices, courthouses, city halls, fire and police stations, jails, prisons, arsenals, armories, army barracks, etc.

[8] Includes railroad, bus and airport buildings, roundhouses, radio stations, gas and electric plants, public comfort stations, etc.

[9] Includes private garages, sheds, stables and barns, and other buildings not elsewhere classified.

TABLE F–5: Number and Construction Cost of New Permanent Nonfarm Dwelling Units Started, by Urban or Rural Location, and by Source of Funds [1]

Period	Number of new dwelling units started									Estimated construction cost (in thousands) [2]		
	All units			Privately financed			Publicly financed					
	Total nonfarm	Urban	Rural nonfarm	Total nonfarm	Urban	Rural nonfarm	Total nonfarm	Urban	Rural nonfarm	Total	Privately financed	Publicly financed
1925 [3]	937,000	752,000	185,000	937,000	752,000	185,000	0	0	0	$4,475,000	$4,475,000	
1933 [4]	93,000	45,000	48,000	93,000	45,000	48,000	0	0	0	285,446	285,446	
1941 [5]	706,100	434,300	271,800	619,511	369,499	250,012	86,589	64,801	21,788	2,825,895	2,530,765	295,130
1944 [6]	141,800	96,200	45,600	138,692	93,216	45,476	3,108	2,984	124	495,054	483,231	11,823
1946	670,500	403,700	266,800	662,473	395,673	266,800	8,027	8,027	0	3,769,767	3,713,776	55,991
1947	849,000	479,800	369,200	845,560	476,360	369,200	3,440	3,440	0	5,642,798	5,617,425	25,373
1947: First quarter	138,100	81,000	57,100	137,016	79,916	57,100	1,084	1,084	0	808,263	800,592	7,671
January	39,300	24,200	15,100	38,216	23,116	15,100	1,084	1,084	0	223,577	215,906	7,671
February	42,800	25,000	17,800	42,800	25,000	17,800	0	0	0	244,425	244,425	
March	56,000	31,800	24,200	56,000	31,800	24,200	0	0	0	340,261	340,261	
Second quarter	217,200	119,100	98,100	217,000	118,900	98,100	200	200	0	1,361,677	1,360,477	1,200
April	67,100	37,600	29,500	67,100	37,600	29,500	0	0	0	418,451	418,451	
May	72,900	39,300	33,600	72,900	39,300	33,600	0	0	0	452,236	452,236	
June	77,200	42,200	35,000	77,000	42,000	35,000	200	200	0	490,990	489,790	1,200
Third quarter	261,200	142,200	119,000	260,733	141,733	119,000	467	467	0	1,774,150	1,770,475	3,675
July	81,100	44,500	36,600	81,100	44,500	36,600	0	0	0	539,333	539,333	
August	86,300	47,400	38,900	86,108	47,208	38,900	192	192	0	589,470	587,742	1,728
September	93,800	50,300	43,500	93,525	50,025	43,500	275	275	0	645,347	643,400	1,947
Fourth quarter	232,500	137,500	95,000	230,811	135,811	95,000	1,689	1,689	0	1,698,708	1,685,881	12,827
October	94,000	53,200	40,800	93,540	52,740	40,800	460	460	0	678,687	675,197	3,490
November	79,700	48,000	31,700	78,835	47,135	31,700	865	865	0	584,731	578,324	6,407
December	58,800	36,300	22,500	58,436	35,936	22,500	364	364	0	435,290	432,360	2,930
1948: First quarter	177,300	101,200	76,100	174,996	99,052	75,944	2,304	2,148	156	1,287,460	1,268,661	18,799
January	52,600	30,400	22,200	51,776	29,603	22,173	824	797	27	372,657	365,886	6,771
February	49,600	28,800	20,800	48,445	27,774	20,671	1,155	1,026	129	363,421	354,218	9,203
March	75,100	42,000	33,100	74,775	41,675	33,100	325	325	0	551,382	548,557	2,825
Second quarter [7]	291,800	163,700	128,100	288,913	162,404	126,509	2,887	1,296	1,591	2,198,259	2,171,801	26,458
April [7]	98,800	54,400	44,400	97,518	54,156	43,362	1,282	244	1,038	729,713	717,996	11,717
May	97,000	56,400	40,600	95,792	55,667	40,125	1,208	733	475	737,182	725,745	11,437
June	96,000	52,900	43,100	95,603	52,581	43,022	397	319	78	731,364	728,060	3,304
Third quarter												
July [8]	94,000	49,700	44,300	93,640	49,340	44,300	360	360	0	725,900	723,032	2,868

[1] The estimates shown here do not include temporary units, conversions, dormitory accommodations, trailers, or military barracks. They do include prefabricated housing units.

These estimates are based on building-permit records, which, beginning with 1945, have been adjusted for lapsed permits and for lag between permit issuance and start of construction. They are based also on reports of Federal construction contract awards and beginning in 1946, on field surveys in nonpermit-issuing places. The data in this table refer to nonfarm dwelling units started, and not to urban dwelling units authorized, as shown in table F–3.

All of these estimates contain some error. In 1948, for example, if the estimate of nonfarm starts is 50,000, the chances are about 19 out of 20 that an actual enumeration would produce a figure between 47,600 and 52,400. In 1946 and 1947, the range of error was approximately twice as large. The reduction was achieved by improvements in estimating and survey techniques.

[2] Private construction costs are based on permit valuation, adjusted for understatement of costs shown on permit applications. Public construction costs are based on contract values or estimated construction costs for individual projects.

[3] Housing peak year.

[4] Depression, low year.

[5] Recovery peak year prior to wartime limitations.

[6] Last full year under wartime control.

[7] Revised.

[8] Preliminary.

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